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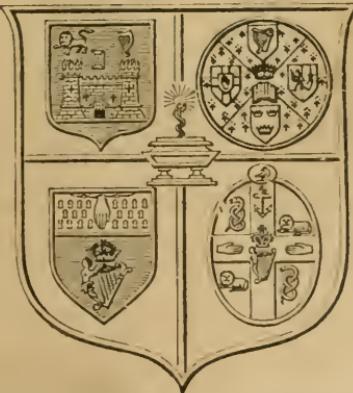
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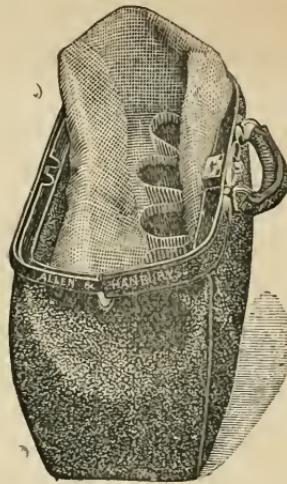
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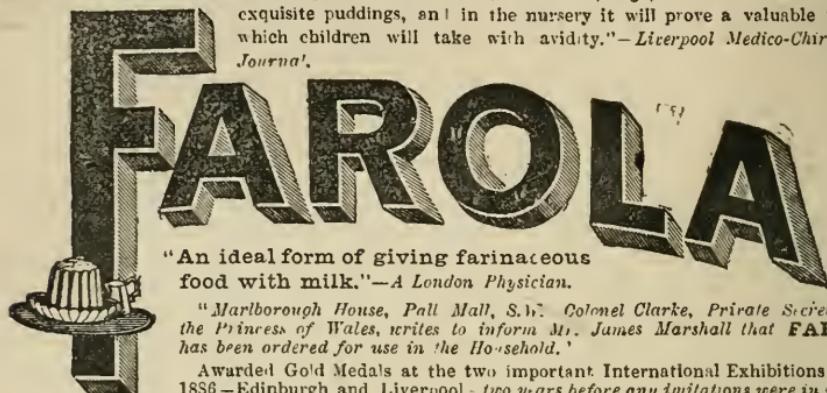
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NOVEMBER 1, 1895.

PART I.

ORIGINAL COMMUNICATIONS.

ART. XIII.—*Diet in the Aetiology and Treatment of Diseases of the Skin.*^a By WALTER G. SMITH, M.D.; ex-President of the Royal College of Physicians of Ireland; Physician-in-Ordinary to his Excellency the Lord Lieutenant.

LET me, in the first instance, ask—have we any certain or exact scientific knowledge of the influence of diet in the causation of diseases of the skin?

The belief in the potency of this influence is universal with the laity, and widely acknowledged by the profession generally. But the practice of physicians is partly traditional, and is, unfortunately, not always based upon real conviction or sound knowledge. Many circumstances conspire to tempt them to give formal advice which rests upon a slender foundation.

I start with the two propositions, that the real influence of diet in the causation of skin diseases is a small one, much less than it is credited with, and that our substantial knowledge of the subject is still more limited.

Fundamentally, the action of food and of drugs is to be explained upon similar general principles. But great as are the difficulties of forming a correct judgment of the mode of action of a drug, still greater are the complexities which surround questions of dietetics in the causation of cutaneous affections.

^a Read in the Section of Dermatology, British Medical Association, London, August, 1895.

We are always, and in all places, confronted with the problem of the idiosyncrasy of the individual, which is a real and perplexing difficulty, and we should be more cautious than we are in formulating cut and dry rules for the guidance of our patients' stomachs. In very many cases an intelligent and temperate patient knows, or ought to know, better than his doctor what suits him, and what aggravates his complaint.

I heartily endorse Sir W. Roberts' simple and sensible rule of conduct, viz., "It may be regarded as certain that any food or food accessory, the use of which is followed by a sense of discomfort, is not beneficial to that individual" (*Dietetics*, p. 106); and, conversely, as Pye-Smith puts it, "What most people eat is for most people wholesome, and what a natural appetite finds appetising seldom disagrees."

The tendency of modern inquiries has been largely towards the more exact determination of aetiological factors; hence we have been gradually led to minimise laying stress upon vague and indefinite conceptions, such as diatheses and the like, and of these vague causes diet is, I think, one so far as the skin is concerned. Moreover, the rise and progress of bacteriology has profoundly modified our notions of the cause of many diseases of the skin and influenced our treatment. I need only allude to the pathology of boils, carbuncles, and acute suppuration generally.

Although it is by no means proven that eczema, and, even less, psoriasis, are parasitic diseases, still the mere ventilation of such a possible cause for these affections tends to throw into the background loose speculations and traditional surmisings as to the effect of dietetic causes in originating diseases of the skin.

We may picture to ourselves four modes or ways, at least, in which diet may possibly influence the skin:—

I. Through the general nutrition of the body. Nutrition is influenced in a very subtle manner by the quality of the food (Roberts), and insufficient or improper food lowers the tone of all the tissues, skin included. Under such conditions we meet with scorbutic and purpuric affections. Destructive and pyogenic microbes find a more suitable soil whereon to fasten, and hence arises a greater liability to pustular and gangrenous developments.

The fungus of "thrush" lies in wait for debilitated constitutions, and favus is far more common among the neglected and ill-fed poor.

II. By acting as a reflex stimulus from the gastro-intestinal surface. This is doubtless the most common mode. The physiological relationship between the skin and the digestive mucous membrane is incontestable, and proofs are abundant.

Over-eating, on the one hand, and, on the other, the use of unsuitable, indigestible, or irritating articles of diet, are frequently followed by either neurotic or vaso-motor disturbance in the skin—*e.g.*, urticaria.

The skin affections producible in this way are all transitory, and disappear spontaneously, as a rule, when the causes cease to act.

Many people eat far too much and overload their digestive energies, and some of them would pay a worse penalty than they do were it not for the dinner pill, the morning saline, or the occasional visit to Carlsbad.

Three practical considerations flow from these thoughts :—

- (a) The utility of purgatives in such cases.
- (b) The importance of good cookery in avoiding or overcoming dietetic irritation.
- (c) The due regulation of diet as to quantity and kind.

III. By absorption into the blood of irritating substances, or of products of chemical change, which indirectly affect the skin.

In this direction we may look for explanation, in part at least, of the occasional injurious effects of tinned and preserved foods. Pathogenic bacteria may undoubtedly enter the body with articles of diet.

We are all familiar by daily observation with the hyperæmia of the skin which ensues upon full doses of alcohol.

IV. The skin may suffer in virtue of being one of the channels or avenues of elimination. Certain drug eruptions arising from volatile oils or oleo-resins—*e.g.*, copaiba, cubeb, and turpentine, are, perhaps, explicable upon this hypothesis. And, upon similar grounds, we caution our patients against the use of highly-seasoned foods and spices (*i.e.*, volatile oils) in erythematous and acute inflammatory affections of the skin.

To turn now to another aspect of the question—viz., diseases of the skin in relation to diet. We can at once make three groups:—

1. Cutaneous diseases liable to originate in, or acknowledged by common consent to be materially influenced by, diet.
2. Cutaneous diseases possibly, but not proven to be, influenced by diet.
3. Cutaneous diseases certainly not affected by diet—*e.g.*, herpes, pemphigus, lichen ruber, ichthyosis, ringworm, &c.

In Class 1 we may instance:—

- (a) Erythema; certain forms of.
- (b) Urticaria.
- (c) Pruritus.
- (d) Acne Rosacea.
- (e) Acne Vulgaris, perhaps.

Bulkley states that in some persons crops of acne follow the free use of buckwheat (*Eczema*. 2nd Ed., p. 291).

Pye-Smith affirms that in some patients a fresh outbreak of follicular inflammation can be produced at will by eating “crystallised” fruits, strawberry jam, or orange marmalade (*Brit. Journ. of Derm.*, July, 1895.)

In Class 2 may be placed psoriasis, most cases of eczema, and of acne vulgaris.

Eczema in children is very frequently attributed to dietetic influences, such as too free use of sugar, or even of milk. But for my part, I quite concur with Dr. Cheadle in never having been able to satisfy myself that eczema is a diet disease (Cheadle, *Artificial Feeding of Infants*, p. 161). Many infants attacked with severe eczema are of a ruddy colour, have a good appetite, and with all the appearance of excellent health.

It is the present habit to ascribe many skin diseases to gout, and we hear every day of “gouty eczema,” “gouty psoriasis,” and the like, and patients ask for, and expect to get from us, minute directions about their culinary arrangements. Yet few English practitioners conversant with diseases of the skin, would go so far as Brocq in saying that the regulation of the diet is the most efficacious internal treatment for eczematous patients.

The hypothesis of leprosy having been transmitted by food of any kind, and in particular by fish, has not been established

by further examination. Boils are often ascribed to errors or deficiencies in diet. With our knowledge of the pathogeny of boils and acute suppurations, it is, to my mind, incredible how a crop of boils, as is stated on good authority, can arise through mere change of diet—*e.g.*, a surplus of animal food.

In England the consumption of meat is 136 lbs. per head per annum. In France it is only 46 lbs. per head per annum. Are boils so much more common in England? Eczema affects the sexes almost equally, although men probably eat two-thirds of the total meat consumed, and drink probably three-fourths of the total alcohol consumed in the United Kingdom.

If we direct our thoughts to determine what special articles in our dietary may be held responsible for harming the skin, we have not a long list, as will be gathered from the preceding remarks.

Coffee, tea, perhaps highly spiced foods, excessive use of hard, salted meats, shell-fish, abuse of alcohol, and foods such as starch and other carbohydrates, which may lead to production of excess of acids (acetic, lactic, butyric) in the intestines. A wide-spread and deeply rooted custom is the strict prohibition of salted food in diseases of the skin. For many years I have ignored this rule, and neither my patients nor myself have had reason to regret the liberty accorded to them.

Chloride of sodium is a very harmless salt, and some people with weakly digestion or a jaded appetite will relish and easily digest a thin slice of ham when the stomach would revolt against other meat. It is high time that medical men should emancipate themselves from lazy acquiescence in, or mere blind following of, tradition.

Does alcohol in moderation cause any skin affection? That it is apt to aggravate itching and increase an already existing congestion of the skin is quite true.

Most of the Asiatic populations, with the exception of the Japanese and the Indian Parsees, drink no alcohol. Yet I do not know that this experiment, on the large scale, indicates any advantage to those races *quoad* the skin.

I cannot but believe that the ill effects of alcohol, and I may add, of tobacco, are exaggerated by their extreme opponents.

Plenck (quoted by Bulkley) remarks of acne—“*Plures curavi suadendo, ut vinum bibere incipient.*”

Lastly, a word as to the practical outcome of all this.

How are we to answer intelligently the questions so often addressed to every one of us by our clients—What shall I eat? What shall I drink?

In cases such as diabetes, gastric ulcer, and enteric fever, there is a tolerable degree of unanimity in our answers.

But what about the slighter ailments and indispositions which constitute the bulk of our practice?

A large number of our patients with affections of the skin are not obviously out of health, and are well able for their day's work in the world. Yet many of these persons are apt to ponder over their health, put us through a catechism as to their diet, almost constrain us to go beyond our knowledge, and even glory in the dietetic chains which are fastened around them by their medical advisers. Unluckily, it sometimes happens that one practitioner's rules flatly contradict those of his neighbour, and so a shrewd patient is liable to arrive at the unpleasant conclusion that, as Sir W. Roberts puts it, our notions on dietetics are little better than a farrago of whims and fancies. We are too formal in our rules, and impose unnecessary and unmeaning restrictions. We prescribe diet by printed forms, making no allowance for idiosyncrasies, and giving even our educated patients little or no latitude or opportunity for their own sense of what is good and what is bad for them.

In my judgment, the main precept we need enjoin as a golden rule upon our patients suffering from diseases of the skin, is moderation and temperance in all matters of eating and drinking, especially as regards alcohol; and we should seek to train the public to observe for themselves whether such and such an item of diet really agrees with them or not.

With all this borne in mind, there is plenty of room for judicious advice tempered with common sense, and a hint or a suggestion is often better, although less showy, than the imposition of conventional rules. This latter course is, no doubt, sometimes requisite with the hypochondriac, the sensualist, or the careless, who will not listen to, or are incapable of understanding the still small voice of healthy instincts and of personal experience.

To sum up in a few words :—

1. Very few skin diseases are directly traceable to dietetic causes, but improper diet may aggravate existing eruptions. Idiosyncrasy must be largely allowed for.

2. The diseases that may so arise are of a transitory character, and mostly belong to the class of erythema.

3. Diet has very little influence in promoting the cure of cutaneous eruptions. The results are far behind popular expectations, even in such cases as acne rosacea, where we are led to hope for much.

4. Avoidance of alcohol, regulation of the bowels, and the cure of anaemia, are of infinitely greater importance than special dieting in the management of diseases of the skin.^a

ART. XIV.—*On the Limitation of Chronic Rheumatic Arthritis to Parts of Joints.*^b By E. H. BENNETT, M.D., F.R.C.S.; Surgeon to Sir P. Dun's Hospital; Professor of Surgery, Trinity College, Dublin.

THE specimens which I submit are examples of a remarkable feature to be noticed in certain joints affected by chronic rheumatic arthritis—namely, the strict limitation of the disease to parts of the articular surfaces. I am well aware of the fact that in almost every joint there are particular spots in which the disease, in its ordinary form, shows its effects most—where it starts and attains its greatest development; but, in general, one can trace the effects of the disease over all the joint in some degree. In the examples I now exhibit, while the disease is fully developed in one spot or district of the joint the other parts of the joint appear absolutely healthy, only the opposing surfaces of the limited area are affected; or, as in this example, the scapula-humeral joint is healthy, but the lesser tuberosity of the humerus, and the tendons in contact with it are affected.

Of this disease in the shoulder I present two examples—the first a dry and macerated humerus, the second a recent

^a I have discussed this matter with my friend, Dr. Wallace Beatty, and these propositions represent our joint views.

^b Read before the Section of Pathology of the Royal Academy of Medicine in Ireland, November 2, 1894.

specimen which shows all the details of the disease. Without the knowledge supplied by this recent specimen, I am certain many would question my diagnosis of the deformity which the dry bone presents. In it the lesser tuberosity of the humerus looks as if it had been ground down to its base, and the inner limit of the bicipital groove is gone. The surface of the head of the bone is normal without any feature of chronic rheumatic wearing of the cartilage, or any of the deposits of bone on its margins so familiar in the ordinary forms of the disease.

The recent specimen, which enables us to read correctly the features of the dry one, attracted attention before the dissection of the shoulder by its deformity. It presented many of the features of an unreduced dislocation of the humerus beneath the coracoid process, for the upper extremity of the bone lay in this position. The acromion process projected strongly, and the deltoid region was flattened. There was not, however, any difficulty in pressing the elbow against the chest wall, and the motions of the joint were much less restricted than in the old unreduced dislocations which I have dissected. I left the diagnosis open, and made the dissection with care to determine the question as to whether the displacement was to be regarded as pathological or traumatic.

I noted the fact that the opposite shoulder was normal, and that the other joints did not appear diseased. I looked in two directions for evidence to determine the question. I dissected the attachment of the sub-scapular muscle, and, cutting it across in the sub-scapular fossa, I reflected the tendon towards the upper end of the humerus. In doing this I found that the capsule of the shoulder had not been ruptured in this position at any time nor the sub-scapular tendon, and that the bursal pouch, which extends out towards the sub-scapular fossa from the joint, was normal. These facts go to prove that the joint had not been the subject of antero-internal traumatic dislocation.

I next dissected the long tendon of the biceps muscle, and found that it had acquired an abnormal attachment to the humerus in the upper part of its groove, and to the capsule of the shoulder as it does in the ordinary form of

chronic rheumatic arthritis of the shoulder. A part of the tendon in the joint can be traced on the inner surface of the capsule, but not frayed in shreds as in the ordinary disease. These points go far to establishing the diagnosis of pathological dislocation, for in the traumatic the tendon of the biceps is usually intact. Now, when the capsule is raised on the inside of the bicipital groove, we find the sub-scapular tendon in a great measure absorbed, only adherent to the capsule, and the lesser tuberosity absorbed, as in the dry specimen, and its surface presents the appearance of absorption of bone by chronic rheumatic arthritis.

I would now show a couple of specimens from other joints which display this remarkable restriction of chronic rheumatic arthritis, as attested by the destruction of the articular cartilage and the wearing away of the bone, while the adjoining joint surfaces remain quite unaffected. Here is a radius in which the depression for the scaphoid bone is cut clean away, and the bone is deeply grooved and highly polished while the depression which lodges in the semilunar bone is free from disease, and its cartilage quite normal. In this case I have, unfortunately, got none of the other parts of the wrist, the radius only being preserved.

In the skeletons of two hands, which I preserved for another purpose, we find in one the polish of eburnation developed to the full in the articulation between the scaphoid bone and the radius, while the semilunar district of the joint is quite healthy. No other joint of this hand exhibits any rheumatic disease, and in the opposite wrist only the articulation of the pisiform bone with the cruciform, and the first metacarpo-carpal joint present any rheumatic changes. In the latter joint they are the result of the damage done to the joint by fracture of the base of the metacarpal bone, and are therefore to be classed as traumatic. Clearly these examples are not the product of the form of chronic rheumatic arthritis that Professor Adams described under the title "constitutional." I think whatever view we may take of the essential nature of this disease, whether we regard it as the product of a special blood poison, as the name "constitutional" would suggest,

or as attributable to nerve influences, or to failure of nutrition or atrophy of the joint structures, or, again, as set up by injury as it probably has been in these examples, we must put aside the idea that suggests itself so readily in examining joints affected by the more common form of the disease—namely, that the tissue primarily affected is the cartilage; that in the changes which are seen in so-called “true velvety degeneration” of the articular cartilage we see the first essential pathological change.

We read in Billroth's lectures the following:—“The disease chiefly affects the cartilage, secondarily the synovial membrane also, as well as the periosteum and bone; in most cases the cartilage is primarily attacked.” In the disease as it appears in the shoulder joints which I have presented it occurs where there is no cartilage. I have already published instances of the disease as it occurs in bursæ, which do not contain any cartilage. So that this tissue although very commonly the first seat of the disease, is not an essential for its existence.

The fact that the disease can exist in a restricted part of a joint without causing any damage to the general cavity puts aside the idea that changes in the synovial secretion originate the degeneration of the cartilage. The examples which I have shown are instances of what I might term the most local variety of the disease, which Prof. Adams described thus:—“As a purely local disease it has been frequently found to have originated in accident.”

ART. XV.—*Malignant Tumour of the Middle Ear.*^a By
J. B. STORY, M.B., F.R.C.S.I.; Surgeon to St. Mark's
Ophthalmic Hospital.

THE extreme rarity of malignant growths in the middle ear induces me to bring the following case before the Academy:—

CASE.—Mr. W. E. was sent to me for an affection of his left ear by my friend Dr. Whitty, of Waterford, in September, 1894. The only history to be obtained was that the ear had been running

^a Read before the Section of Pathology of the Royal Academy of Medicine in Ireland, April 5, 1895. [For discussion on this paper, see p. 455.]

for two months or longer, and been causing him constant pain, which had become much worse of late, subsequent to the extraction of some decayed teeth. In spite of this ear trouble and the pain he had been in good health enough to bathe constantly during the summer.

On examining the ear I found a most foetid otorrhoea, and a large polypus springing apparently from the posterior and upper portion of the tympanum. There was a painful swelling at the apex of the mastoid process, which I regarded as inflammatory, but there was no tenderness of the skin over the mastoid process itself, nor tenderness on deep pressure.

I removed the polypus with Wilde's snare, and the painful swelling below the apex of the mastoid disappeared within two days after the operation. I found then what I had not observed before, a small granulation at the very entrance of the meatus on the posterior wall—there was no fistulous opening in it, and all the foetid pus came from the tympanic cavity. Mr. E. could not stay in Dublin for further treatment, and went home to use antiseptic lotions under Dr. Whitty's supervision.

About a month later he returned to Dublin in a worse-state than before, severe pains shooting all over the left side of his head, the swelling below apex of mastoid larger than before, a foetid discharge, and a large bleeding polypus filling up lower part of meatus.

On October 31st I removed part of this polypus, and detected necrosed bone on anterior wall of meatus. Three days later I put him under chloroform, with the assistance of my colleague, Mr. Arthur Benson, and cleared out all the granulations in the meatus with a curette. I then found both the anterior and posterior walls of the meatus necrosed—apparently the whole tympanic ring being implicated.

November 8th I removed a loose piece of bone from the anterior wall of meatus, and on the succeeding night he had the first good night's sleep he had had for weeks.

During the next fortnight, however, the swelling in the neck, before described, went on increasing, and a gland at the angle of the jaw began to enlarge also. The meatus, too, began to fill up again with granulations, and I had to clear them away a second time—this time with electro-cautery under local anaesthesia induced by cocaine.

The swelling in the neck then began to subside, and air passed easily through the Eustachian tube and tympanum by Politzer's method. The violent pain, however, still persisted, though not so constantly as before.

He left Dublin only to return after some ten days, unable to bear the pain, and requiring hypodermics of morphia to enable him to sleep.

I found then the granulations in the meatus increasing again, and the swelling in the neck larger. It was plain that though some of the swelling was probably inflammatory—viz., an abscess—much of it was caused by mere glandular enlargement. I cauterised the granulations, and made the meatus and tympanum clear again, but there was no improvement in his condition, and Mr. Tobin then saw him with me in consultation, and I had the great advantage of his assistance in the subsequent conduct of the case.

We considered at that time that the disease was probably inflammatory, and that the best chance for the patient was to give free exit for purulent and other discharges by establishing good drainage.

On December 13th we made an opening into the mastoid by chiseling away some diseased and some healthy bone. Whether this opening extended into the antrum or not I am not even now perfectly certain. We got no pus from it at all events, and the only result in the patient's condition was that from that time till the end he never suffered again from the intolerable deep-seated pain he had in his head.

A week later we curetted the diseased gland at the angle of the jaw. No pus or caseous material was found in it. We also made an incision along the posterior border of the sternocleidomastoid muscle, over the most prominent portion of the diffused and apparently inflammatory swelling of the neck, and having divided the deep fascia passed a director and dressing forceps deeply into the tissues, and plugged with iodoform gauze. At the same time we removed some granulations from the meatus, which (alone) still continued to discharge foetid pus.

Some ten days later M. E. had some teeth removed from the left side, believing that the pain he now suffered from might be caused by the teeth. I took the opportunity while he was under ether of probing the meatus and mastoid wound very thoroughly. In both there was necrosed bone firmly fixed in its place, and from the meatus there was still a foetid discharge.

The wounds were dressed daily, and the meatus syringed out with an antiseptic lotion. For a long time the water was able to pass down the Eustachian tube when the meatus was syringed, and the foetor quite disappeared from the pus in the meatus.

No particular change occurred for some weeks.

On January 4th, and again on January 20th, a piece of necrosed bone was removed.

On January 23rd he developed Bell's palsy.

On January 26th several spicules of dead bone were removed.

Towards the end of January his speech began to be affected. Latterly he was only able to speak in a whisper, and that with great difficulty. He also developed a profuse expectoration of thick viscid slimy mucus, which at first came solely from his pharynx, but, after a time, was also coughed up from the larynx and trachæa. This expectoration became very much diminished in quantity after a time, and the lungs themselves were never actually diseased. The optic discs were healthy when last examined shortly before his death. The swelling in the neck slowly increased, and all the glands of that side of it began to enlarge one by one, and it became evident to us that the patient was suffering not solely from inflammation and caries of the temporal bone, but from some neoplasm which had originated in the tympanic cavity or in some deeply-situated portion of the temporal bone. This view was also impressed upon us by the gradual appearance of florid granulation springing out of the incision which had been made for the purpose of affording free drainage, and was finally rendered certain by microscopical examination of portions of tissue, which was very kindly made for us by Professor Scott.

The patient gradually became weaker, and died early in the month of March, less than eight months after the first observation of any aural trouble.

Professor Scott will inform the Academy as to what the new growth is, histologically.

I have looked up some authorities on the subject of cancerous growths originating in the middle ear or temporal bone. They are extremely rare.

Wilde ("Aural Surgery") records three cases of malignant fungus occurring in his practice, all of which implicated the tympanum and temporal bone, and probably also originated in either of these localities.

Toynbee records also three cases—two of encephaloid cancer and one of fungus haematodes. He believes the disease originates in the tympanic cavity.

The observations recorded by more modern writers are few and unsatisfactory. So far as I can ascertain no case similar to that here recorded has been described in any publication since these of Wilde and Toynbee.

That primary malignant growths in the tympanum or temporal bone are extremely rare may be inferred from the fact that, for the last seventeen years, during which I have

been on the staff of the largest ophthalmic and aural hospital in Ireland, and for the most of that period at the head of the institution, where we see some 1,000 new ear cases every year, no case of malignant disease has been observed.

Report by PROFESSOR SCOTT on Mr. Story's case of malignant disease of middle ear:—

"Two very small portions were placed in my hands, one having been removed from the extreme auditory meatus, and the other from the fungating tissue at the edge of the wound in the neck. These pieces were hardened, and when cut were found to have a similar structure. The mass consisted of a number of small cells, either round or oval-shaped or fusiform—the round shape predominating—between which could be seen fine fibres of connective tissue. Small blood vessels were numerous, these being generally surrounded by a small amount of loose connective tissue. In my opinion the neoplasm must be regarded as a sarcoma."

ART. XVI.—*Notes on a Case of Typhoid Fever, with rare and rapidly fatal complications.*^a By ALFRED R. PARSONS, M.B., Univ. Dubl., F.R.C.P.I.; Physician to the City of Dublin Hospital.

RICHARD B., aged twenty-two, by occupation a labourer, was admitted to the City of Dublin Hospital, under my care, on the 31st October, 1894, complaining of feeling ill and unable to work. His father and mother were both healthy, and his two sisters and two brothers were also in good health. He himself had never been ill previously. For ten or twelve days previous to admission he had been feeling poorly, and had been troubled with diarrhoea and some slight epistaxis.

On admission, he complained chiefly of headache, vomiting, pains in the back and legs, and general weakness. Physical examination—T. 105°, pulse 104, respirations 28; but nothing abnormal was detected in his lungs or heart. There was no tenderness over the abdomen, no distension, no spots, no enlargement of any organ, and the spleen was not palpable.

He was sponged with cold water, and the temperature fell from 105°, at 7 30 p.m., to 103.2° at 9 15 p.m. His urine was normal, except for a faint trace of albumen.

November 3rd.—Crepitant râles were audible over the front and

^a Read before the Section of Pathology of the Royal Academy of Medicine in Ireland, November 30th, 1894. [For the discussion on this paper, see Vol. XCIX, page 345.]

back of his chest, and he was rather troubled with a cough which, he said, "shook" him very much. There was also some slight distension of the abdomen, and some half-dozen spots of an ill-defined character were visible.

For the first eight days after admission the bowels moved once or twice daily. As a rule, light coloured, formed motions were passed, but about the 21st day of his illness he became rather constipated and an enema was occasionally necessary. He slept tolerably well at night, took two or three pints of milk and a pint of beef tea or cocoa daily; and although the pyrexia was rather severe, its tendency on the whole was downwards, from the time of his admission to hospital. His pulse, till the day before his death, never exceeded 108, and his respirations varied from 28 to 36.

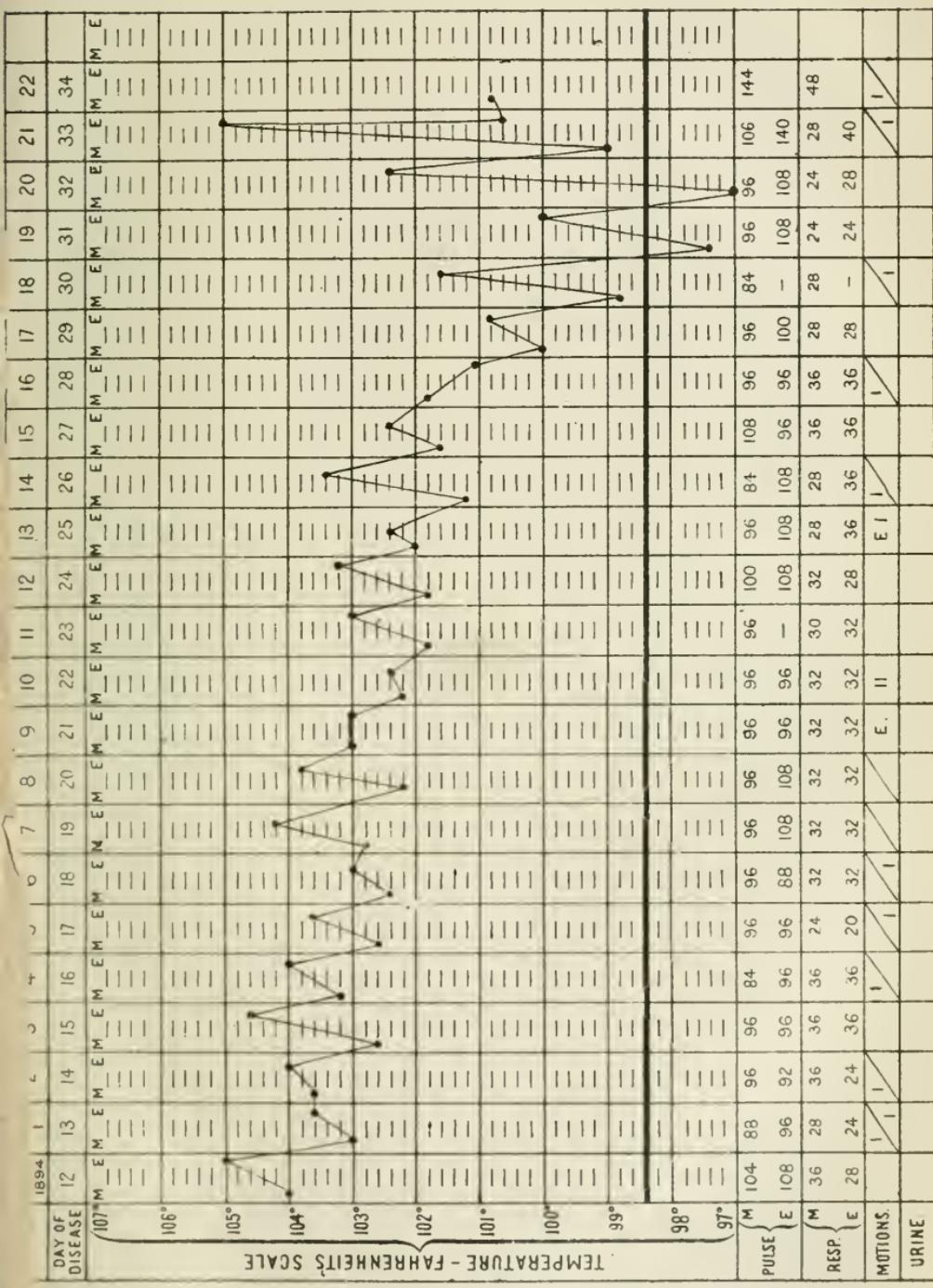
From the duration of his illness, and the absence of any distinct physical signs, I looked upon the case as one of typhoid fever; though I felt it was typhoid fever only by exclusion, and that, consequently, the diagnosis was not so certain as if based on positive signs.

From the 26th day of his illness the decline of his temperature was still more marked, so that on the morning of the 32nd day his temperature was 97°. On that day he seemed very well and made no complaint at all, except for a little pain in his throat. An examination revealed slight enlargement of his left tonsil, and this, I thought, was quite sufficient to explain the pain. That evening the temperature rose to 102.4°, but fell the following morning to 99°. His abdomen was examined again on the 33rd day of his illness, but nothing abnormal could be detected. His temperature, however, commenced to rise, and about 1 p.m. reached 105°. That evening I had a note from the resident medical pupil, Mr. William Croly, asking me to come round and see the patient at my earliest convenience, as he did not seem so well as in the morning. I went to the hospital about 7.30 and heard that, at 3.0 p.m., the patient had gone asleep, and awakened, some time after 4.0 p.m., with difficulty in breathing. His respirations were so loud that they could be heard at a distance of 15 or 20 yards. Dr. Palmer and my resident pupil examined his chest, but could find no pulmonary mischief to account for his dyspnœa. Hot, moist applications were tried, and seemed to give some temporary relief, but, as there was no distinct improvement, I was at once communicated with. On examination there was considerable dyspnœa, distinct laryngeal stridor, sucking in of suprasternal and supraclavicular spaces; distinct, but feeble phonation, a temperature of 100.8°, pulse 140, and respirations 50. He was rather pale, slightly livid about the lips, and sweating slightly on forehead. A hasty laryngoscopic exami-

nation, which, needless to say, was made with great difficulty, revealed an enormously swollen and brilliantly red epiglottis, with some yellowish material along its edges. It was manifest that an acute œdema of the glottis had occurred, and that the only way by which relief could be afforded was a tracheotomy. Arrangements were at once made, and the senior surgeon, Mr. Henry Gray Croly, communicated with. Mr. Croly arrived in a few minutes and decided on performing the low operation, so as to get away, as far as possible, from the laryngeal mischief. The trachea was situated deeply, and considerable venous haemorrhage took place. On opening the trachea a distinct improvement in the patient's aspect was noticed, but each attempt at inserting the tube seemed to bring on a spasm of coughing. After the tube, on one occasion, had been worn for a few minutes, it was noticed that the tapes had become very tight. Presently the neck was found to be considerably swollen, the face became puffed and tympanitic, the upper part of the trunk showed a similar condition, and in a few hours the emphysema had extended down to Poupart's ligaments. The patient passed a restless night, the pulse became weaker and more frequent, and about 11 a.m. the following day the patient died.

The *post-mortem* examination, which was made twelve hours after death, revealed such extensive swelling of the epiglottis and surrounding structures that the vocal cords, on looking into the larynx, were quite invisible. Along the lateral margins of the epiglottis was a greyish material which did not present the characters of a false membrane, but looked much more like a superficial necrosis, the result of a very acute inflammation. When the parts were sufficiently pressed asunder to allow of a view of the vocal cords, it was found that they were quite normal. The tracheotomy wound was directly in the centre and quite free. The lungs were engorged with blood, and no abnormality was detected in the heart. In the abdomen, the spleen was somewhat enlarged and soft. The intestines seemed normal till within about two feet of the ileo-cæcal valve a small circular ulcer in a Peyer's patch was found. Two other ulcers, a little lower down, the larger of which was immediately above the valve, and about the size of a two-shilling piece, were present, and a few small circular ulcers were found in the large intestine. There was also distinct enlargement and congestion of the mesenteric glands.

The appearances at the autopsy, therefore, confirmed the clinical diagnosis of typhoid fever. The small amount of ulceration and, more especially, the shape of the ulcers, are not without interest. As a rule, typhoid ulcers are oval in shape and have their long axis in the length of the intestine, but, occasionally,



they assume the circular form. (See plate accompanying the article on "Abdominal Typhus" in the *Real Encyclopädie der gesammten Heilkunde*).

The most remarkable feature in this case was the sudden onset of acute laryngeal symptoms. Except slight hoarseness, most probably the result of a little catarrh, laryngeal complications in these countries are exceedingly rare. Murchison, with his enormous experience, met only three or four cases of ulceration of the larynx in typhoid fever, while on the Continent, Hoffmann states, it is present in 28 out of 250 cases. Zuelzer observed it in more than 20 per cent. of the fatal cases, and Griesinger found it present in 31 out of 118 autopsies. The condition has been described as perichondritis typhosa by Rokitansky. Liining states that œdema was present in 9 out of 115 autopsies of enteric fever cases, in which there were serious laryngeal complications. With regard to the cause of these ulcers, different views have been held by various authors. Dr. Watson Williams succeeded in isolating the bacillus typhosus from one of these ulcers, and consequently believes that these lesions are to be looked upon as specific typhoid ulcers. This view has also been held by Rokitansky and Mackenzie, while Hilton Fagge and Murchison considered them rather as secondary lesions. Unfortunately, in this case, no cultures were made from the laryngeal ulcers, and, consequently, no conclusive evidence can be deduced as to their nature; but, so far as a microscopic examination of the diseased parts is of any weight, it goes to support the latter view, inasmuch as the sections present enormous numbers of micrococci.

The occurrence of emphysema is, I think, to be looked upon as one of those rare complications of a tracheotomy, the explanation of which is obscure; but, at the same time, it must be borne in mind that, in a few cases of typhoid fever, emphysema has occurred in which no tracheotomy was performed. It was Dr. Wilks who first satisfactorily explained this very rare condition, by pointing out an ulcer on the posterior part of the trachea, through which the air escaped into the tissues. It is, therefore, conceivable that the emphysema may, in this case, have happened quite independently of the operation.

ART. XVII.—*Acromegaly, with Ocular Complications.*^a By ARTHUR BENSON, M.A. Univ. Dubl., F.R.C.S.I.; Ophthalmic and Aural Surgeon to the City of Dublin Hospital; Junior Surgeon to St. Mark's Ophthalmic Hospital.

ACROMEGALY is a disease which, of recent years, has attracted a good deal of attention, and yet about which very little is definitely known. I thought that the notes of a case which I had under observation might not be without some interest to this Section, as such cases are of equal interest to the ophthalmologist, the physician, and the pathologist; and each case carefully noted may assist the statistician in arriving at general conclusions:—

CASE.—M. C. H., aged thirty-eight; bachelor; farmer.

History.—Father died at the age of eighty; mother died at the age of fifty-five. Both had been strong, healthy people, and died from acute diseases. The patient has two brothers younger than himself, and one sister, older; one sister died at the age of twenty from "cold caught at school." The living members of family are all strong and healthy. His father was always a big, bony man, and his brothers also are big, strong, bony men, but light and active, not stout like the patient. He used to weigh twelve stone at his best. Twelve years ago, in 1883, he hurt his left knee and leg by the fall of a cart of oats. This prevented him from taking his usual exercise for a long time. He used to ride a great deal and hunt, but since 1883 he had to stop hunting, and gradually got very much heavier than before. His general health, however, seemed good, but he got a bit "lazier in himself," and slept at odd times during the day more than before, and also at night he slept very well. His appetite was good, and all the functions of the body were regularly performed. He never suffered from headache, but now and again felt a sort of feeling as of blood in the head. He never had pain in the eyes.

In January, 1892, he had an attack of influenza, not severe. After this he began to find that he required more light to enable him to see clearly at night.

On June 8th, 1892, he consulted me on account of a failure of sight in both eyes, because he found difficulty in counting cattle in

^a Read before the Section of Pathology of the Royal Academy of Medicine in Ireland, November 30, 1894. [For the discussion on this paper, see Vol. XCIX., page 344.]

the field, &c. He would count them differently each time and could never feel sure that he was right. He then stated that the defective sight was first noticed about two or three years before, but that it had got worse for the last six or eight months. He smoked two or three ounces of twist tobacco in the week. His vision was $\frac{6}{60}$ in each eye, with an almost total central scotoma for colour, and defective colour sense over the whole of the temporal half of each field of vision, the defect in the left eye being decidedly greater than in the right eye. The colour vision of the nasal halves was fairly perfect. When first seen the central vision was only $\frac{6}{60}$ and peripheral vision $\frac{6}{18}$. After three weeks' use of iodide of potassium and cessation from smoking, the central vision improved to $\frac{6}{6}$. There were perivascular white lines (thickening of tunica adventitia) along both veins and arteries on the disc, and for a short distance on the retina, otherwise the fundus seemed normal unless for a doubtful paleness of the disc. He was then a large, heavy man, but I regarded him as a naturally big, heavy man, and made the diagnosis of toxic amblyopia, advised the stopping of tobacco, and he was to come back in a few weeks, which he did, as above stated, with almost perfect vision. He returned home, promising to abstain from smoking and return in a few months' time to report progress. I regret that through stress of circumstances no chart of the field was made at this time.

The next time that I saw him was on November 17th, 1894, *i.e.*, after an interval of two years and five months. He stated then that he had had perfect health and sight from the time that I saw him before till about two months ago; since then the sight had rapidly failed. He had taken to smoking again, and partly blamed that for his trouble—that is to say, that for two years and three months, while he had abstained from smoking, he had enjoyed “perfect sight” according to his own estimate. He was now a different-looking man; his face and hands in particular struck me, and his figure was bent, and he seemed to require a stick to steady himself with. There was no abnormality discoverable in thyroid or thymus gland.

His face and head had grown large and heavy-looking. His nose was large, his under-jaw prognathous, and the ramus long, and the mouth heavy-looking. The eyelids were puffy, and the eyes prominent, with slight strabismus. The ears were very large, especially the left one. His hands were large and “spade-shaped,” and the fingers round and sausage-like. His feet, also, were most remarkable-looking, and the joints of ankles, wrists, and elbows, were very massive. His pose was quite characteristic. The back

and shoulders were stooped, and the prominent chin almost touched his chest. His speech was rather slow, but his intelligence seemed quite unimpaired.

He complained of little except what he called a "dumb pain" in the arms and legs; he had but little strength in legs and hands, and his grasp was very feeble for such a giant fist and arm. He was not sensitive to pain, and complained of feeling "dull in himself."

As a young man, hunting, he found it hard to get gloves large enough to fit him, and since then his hands have grown very much larger, and he has in every way increased in size. He used to be known as a strong, active man, and very handsome. The change in the shape of his mouth is what most attracted his friends' attention.

His cranium has increased slightly. He used to wear a hat $6\frac{7}{8}$; now he wears $7\frac{1}{2}$. He has had to get his boots made larger, and his legs have numerous large varicose veins, and he has the characteristic stoop of the shoulders. He is more disposed to sleep than formerly, and his appetite is excessive. He has no feeling of thirst, nor does he drink any fluid in excess.

His general health seems to be perfect, and he is free from every other organic lesion. His urine is free from albumen and sugar and indican, but rich in urates and uric acid crystals.

The vision in each eye had again fallen to $\frac{5}{60}$; the right eye being the better of the two. The discs were very similar in appearance to what they were in 1892, but more definitely atrophic, though the perivascular thickening was not increased.

November 20th, 1894.—In consultation with Dr. Hawtrey Benson, it was decided to put him on thyroid extract, one tabloid each day to begin with, and it was suggested that possibly pituitary extract might be of use.

The next day the patient came to tell me that he found the left eye was quite blind. On testing him this was found to be the case—L. V. = bare perception of light. But there was no change in the ophthalmoscopic appearances.

In consequence of this sudden loss of sight in the left eye, I asked my colleague, Dr. Story, to see him in consultation, and he agreed in the diagnosis of acromegaly, but advised to put him back for a time on the iodide of potassium mixture, which had done him, apparently, so much good in 1892. Subsequently I had the advantage of consultation with Dr. Fitzgerald and Mr. Swanzy.

The right field of vision shows a remarkable configuration. There is a total central scotoma, combined with a semi-hemian-

opsia of the superior temporal quadrant of the field, the inferior temporal quadrant being the most perceptive position of the whole field for white, though every part of the field has now lost its perception of red and green.

The actual size of the hands can be judged from the accompanying measurements, which I took, and his feet were very similarly enlarged. His feet are terribly squeezed by his boots, but he says he "doesn't easily feel pain," and his feet never bother him when once he has "crushed them into his boots." His teeth were, at the same time, examined by Dr. Arthur Baker, and a cast taken, which I am, through his kindness, enabled to show.

Measurements of Hands, &c.

		RIGHT.		LEFT.
Circumference of wrist -	-	9½ inches	...	9 inches
Do. palm -	-	12 "	...	12 "
Do. thumb	-	4 "	...	4 "
Do. first finger	-	4 "	...	4 "
Do. second finger	-	4 "	...	4 "
Do. third finger	-	3¾ "	...	3¾ "
Do. fourth finger	-	3½ "	...	3½ "

Circumference of neck, 18 inches.

Do. of head from chin over vertex, 29 inches.

Length of right ear, 3½ inches.

Do. left ear, 3¼ inches.

Distance between centres of pupils, 76 mm.

On March 17th, 1893, he weighed 17st. $\frac{1}{2}$ lb., and he weighed 17st. 4lbs. on November 29th, 1894; and his brother thinks he is not now as big as he was a year ago. He says himself that, but for his eyes, he is as good a man as ever he was in his life, and is in perfect health and spirits.

The left eye is almost totally blind, and the sight of the right eye has diminished to fingers at 1 metre. He has to be led about, and supports himself on a stick; but his naturally cheerful disposition prevents him from desponding.

December 1st, 1894.—Right V. = fingers at 0·50m. Left V. = doubtful perception of light. The pupils hardly act to light or accommodation. There is slight divergent strabismus, and the eyes are proptosed a little, and the lids very full and flabby. The ears are very large, especially the right one, which measures 3¾ inches in length.

He has been taking tabloids of thyroid extract (Burroughs, Wellcome & Co.), two each day, between meals, and, though they

do not seem in any way to disagree with him, his sight is steadily and rapidly deteriorating since he began using the tabloids. On the suggestion of Dr. James Little, I stopped the tabloids and put him on fresh thyroid extract, 25 minims three times a week, prepared and sent weekly to him by Messrs. Brady & Martin, Newcastle-on-Tyne.

A fortnight later, December 15th, 1894, his sight had improved in each eye up to $\frac{6}{8}$??? And on January 22nd, 1895, sight was almost perfect again—in each eye it was $\frac{6}{6}$??? and Jä. 1.

Thus, within seven weeks, the sight of the eye improved from fingers at 0·5^m. to $\frac{6}{6}$???, and the sight of the left eye from doubtful perception of light to $\frac{6}{6}$??? and Jä. 1. And this improvement seems to date from the taking of the fresh extract, as he was getting steadily worse all the time that he was taking the tabloids.

There is still a defect in the upper temporal quadrant of the field in each eye. And an attempt was made on more than one occasion to demonstrate Wernicke's hemianopic pupil reaction, but with only uncertain results.

Two months later, March 29th, 1895, I again saw him. He said that he felt "awfully well," but that his left leg had a sort of soreness in the hip muscles below and in front of the joint; that leg, he said, had for years been "a sort of a wooden leg" on him. His appetite was splendid, and the head, he said, was "wonderfully light" and free from the "full sensation" which he felt before.

All through, his grasp had been very weak, especially in the left hand. He considers that his whole left side is weaker than his right.

On November 29th, 1894, he weighed (naked) 17st. 4lbs. On March 29th, 1895, he weighed 16st. 1lb. A loss in four months of 1st. 3lbs.

His sight still remains almost perfect—R. V. = $\frac{6}{6}$ slowly. L. V. = $\frac{6}{6}$??. The discs are much as before—paler than normal, with evidences of past perivasculitis.

Since writing the above I received a letter from the patient's brother, which says—"I have to tell you of the death of my brother, Michael, which occurred on the 25th April. He continued to go on very well under your treatment until he got rheumatic fever, which terminated fatally at the end of a week."

Dr. Crean, of Clonmel, who attended him in his last illness, kindly gave me the following information, he writes—

"I believe that influenza was the cause of Michael H.—'s death. For some months before his last illness he had been making rapid progress. He recovered his sight; was no longer drowsy or apathetic, and attended his ordinary business with an unusual amount of energy. His face was not so swollen and expressionless, and the oedema (mucoid) of his extremities was decreasing day by day. In his case the thyroid extract treatment appeared to work wonders. The 18th of April he went to the Tipperary Hunt Races in fair health and good spirits, and was seized, on his return, with a severe rigor, followed by high fever, pains in the limbs, and all the other usual symptoms of influenza. The day before his death he was clear and collected. The fatal termination, in my opinion, was in no measure due to tumour of the pituitary body."

The pathology of acromegaly seems still a matter of some doubt, but in a very large majority of cases the pituitary body has been, on *post mortem* examination, found to be enlarged, and its pressure on the chiasma accounts for the ocular complications. The few cases where the pituitary body has been found apparently healthy may, perhaps, be explained otherwise.

If the enlargement of the pituitary body be a true hypertrophy, as in the case of many enlargements of the thyroid gland, then it would seem irrational to add further to the already excessive pituitary secretion; but if the enlargement be due to some disease of the gland which destroys its function, then it would seem rational to supplement the fluid which was insufficiently supplied to the organism by pituitary extract obtained from other animals. So far, there are few recorded cases where pituitary extract has been used, and, as far as I know, none where its use gave anything like the same amount of benefit that fresh thyroid extract gave to my case.

Into the literature of the subject I need not enter. My desire being to record a case rather than to exhaust the subject.

The principal points of interest in the case seem to me to be—

- (1.) The early appearance of a *central scotoma* for colours, and probably also hemianopia for colour.
- (2.) The almost complete *recovery of vision* which followed the use of iodide of potassium and the cessation of tobacco.
- (3.) The *return of visual troubles* (after more than two years) when the use of tobacco was resumed.
- (4.) The rapid *deterioration of vision*, which occurred when the thyroid tabloids were first used.
- (5.) The rapid and continued *improvement* which followed the use of the fresh thyroid extract.
- (6.) And the many and peculiar changes which have occurred in the visual field.

ACROMEGALY.

Chart of Vision of MICHAEL H.—.

Date	Right Vision	Left Vision
1892 June 8th	- $\frac{6}{10}$ (central), $\frac{6}{10}$ (peripheral)	$\frac{6}{10}$ (central), $\frac{6}{10}$ (peripheral)
,, 29th	$\frac{6}{6}$	$\frac{6}{6}$
1894 Nov. 17th	$\frac{5}{6}$	$\frac{5}{6}$
,, 21st	$\frac{5}{6}$	Perception of light (imperfectly)
,, 26th	$\frac{1}{3}$,, , (badly)
,, 30th	Fingers at 1 metre	,, , (badly)
Dec. 1st	Fingers at 0.50 m.	,, , (doubtful)
,, 15th	$\frac{6}{10}$??	$\frac{6}{10}$??
1895 Jan. 22nd	$\frac{6}{6}$??? Jä 1	$\frac{6}{6}$??? Jä 1
March 29th	$\frac{6}{6}$ slowly	$\frac{6}{6}$????

PART II.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

RECENT WORKS ON ANATOMY.

1. *An Elementary Text Book of Anatomy.* By HENRY EDWARD CLARK, M.R.C.S., &c. Pp. 283. London: Blackie & Sons, Limited, 1895.
2. *Text-Book of Anatomy and Physiology for Nurses.* Compiled by DIANNA CLIFFORD KIMBER, Graduate of Bellevue Training School, Assistant Superintendent, New York City Training School. New York and London: Macmillan & Co. Pp. 268. 1895.
3. WE find it difficult to seriously criticise this book in a medical paper, written for medical men. It will probably be more useful if we give the plan of the work, and a few extracts to show how that plan is carried out.

The book was written, we learn from the preface, for junior students, for nurses, and for those—amateurs we may call them—who desire to know how their bodies are constructed. To the junior student we do not recommend the work. He had much better take his Cunningham or Ellis with his Quain or Gray and boldly attack his subject at once. There will be no substantial gain from a few months devoted to a book of the catalogue variety as compared with that obtained from the study of a regular text book. The necessary brevity of a small book excludes explanations and full descriptions, if the whole of the subject be included, as in the book before us.

For the nurse, at least for the ordinary nurse, too much is attempted. Practically, everything in the body is included in the brief descriptions. What, we would ask, does the ordinary nurse want to know of the ligamentum denticulatum of the cord, of the layers of the retina, of the laxator tympani,

of the saccule and utricle, or the membrane of Reissner and canalis reuniens of the internal ear?

As to the amateur; well, we think, he is quite as well off without the information which is here provided for him.

The plan of the work is as follows:—The histology of the cell, of protoplasm, and of the tissues, membranes and glands opens the book. Then comes osteology, followed by arthrology, myology, angiography, neurology and splanchnology. An index and an excellent glossary complete the letterpress. The glossary is, in our opinion, one of the most useful parts of the book; it gives a very large number of words with their derivation and their meaning; the pronunciation is unfortunately neglected. The illustrations are numerous, nearly two hundred, and as a rule good.

A few extracts will show the character of the work more clearly. For instance, the sphenoid is described as follows: “This is a very irregular bone placed in the front part of the base of the skull; it assists in forming the cavities for the eyes and nose, the base of the skull and temple; and has numerous nerves and vessels passing through small openings scattered throughout it. Its central part contains two cavities, the sphenoidal cells which are in communication with the cavities of the nose.” “Transitional epithelium,” we are told, “is the early form of the several varieties of epithelium; it generally consists of small, granular, round cells”—the italics are ours. The following are selected at random: “The coronal suture crosses the front part of the head, and unites the frontal bone with the anterior margin of the two parietal bones.” “The soleus does not extend above the knee joint; it arises from the back of the tibia and head of the fibula, and terminates in the tendo Achillis. That tendon is the thickest and strongest in the body, being capable of supporting considerably more than the total weight of the person. It is inserted into the prominent projecting tuberosity of the heel bone (*os calcis*).” “The lingual artery (as its name indicates) supplies the muscles which move the tongue, the substance of that organ itself, and in part the salivary glands.” “The superior laryngeal nerve is almost entirely sensory, it enters the larynx between the hyoid bone and thyroid cartilage, and is distributed to the mucous mem-

brane lining the interior. The exquisite sensitiveness of the voice-box is due to this nerve.” “The stomach is cone-shaped, with its great end directed upwards and to the *right*, and its lesser end downwards and to the *left*. It is divided into a middle part or body, a greater or splenic end, and a lesser or pyloric end.”

In looking through the book we have seen several inaccuracies—*e.g.*, on page 237 we read: “The lower border (of the liver) corresponds, pretty accurately, with the cartilages of the 6th, 7th, 8th and 9th ribs, on the right side. The left lobe extends to about an inch to the *left* of the middle line, &c.” “The spleen corresponds to the 9th, 10th and 11th ribs in the axillary line.” The upper part of the bladder is called the fundus. “Behind the restiform tract (in the medulla) is a very narrow band, the posterior pyramid continuous with the posterior median column of the cord, &c.”

Taking everything into consideration, we cannot say that we are favourably impressed by the work.

2. THIS is a text-book written—or, as the authoress puts it on the title page—“compiled”—by a nurse for nurses, her intention being to supply the information both as regards anatomy and physiology, required by scientifically trained nurses, within the compass of one volume; and to supply it in such a form that the average nurse could understand it and make it her own. All this, in our opinion, the authoress has succeeded in doing well and thoroughly. We have looked carefully through the book and we have found it, in every place accurate, well told, clear, and interesting. From it we can see at once that the compiler took the greatest care, first to master her subject thoroughly, and then to tell it in a way suitable to those for whom it was written.

It is a pleasure, indeed a rare pleasure, to meet a book which fulfils its mission completely and perfectly. We think the volume before us has done this, and we can congratulate the authoress on her excellent work.

The arrangement is good. The anatomy and physiology are not treated in separate sections of the book, but are judiciously and carefully interwoven, an account of the physiology following the anatomical description of each part

or organ. The book is thus made much more interesting to the class of readers for whom it is intended.

The plan of the book is as follows:—It commences with the histology and physiology of the cell and of the tissues of the body. This is followed by the bones, the muscles, the vascular system and circulation, the respiratory system and respiration; alimentation, including an account of glands, of the organs of digestion, the digestive processes and foods; elimination and the kidneys, nervous tissues, the organs of sense, and the female generative organs. The generative system of the male is omitted. A good glossary and an index occupy the remainder of the book.

The illustrations—many of which are taken from Quain—are for the most part large, clear and accurate. One, however, figure 130, p. 224, should have been omitted; the cochlea is entirely wrong and misleading—its base is directed out instead of inwards.

The printing is all that could be desired, and the general appearance of the book is very good.

We think it unnecessary to criticise the work any further; it meets with our entire approval, and we can warmly recommend it to nurses who wish to obtain a thorough and, withal, a simple description of the anatomy and physiology of the body. It will also be found very useful by those engaged in the practice of massage.

The Eye in its Relation to Health. By CHALMER PRENTICE, M.D., Chicago. Bristol: John Wright & Co. London: Simpkin, Marshall, Hamilton, Kent & Co., Limited, Hirschfeld Bros. 1895. 8vo. Pp. 214.

IN reviewing this curious production the critic is placed at a singular disadvantage.

In the publisher's note at the commencement we find it stated, that "some startling and original opinions are advanced by its American author." "The book, will doubtless, excite adverse criticism from certain readers, and possibly some portions of it may even provoke a smile."

The author in his opening chapter says:—

“Many ideas are set forth that are entirely new. Many tests are suggested that may seem strange, and results recorded that appear incredible” (with this we entirely agree!), “but the value of these tests cannot be determined without thorough investigation. Some months, or even a year and more, ought to be spent in the experiments suggested in this work.”

“After investigation,” he says, “I invite criticism.”

Again he says:—

“However extensive the experience of any oculist may have been, I do not expect from him full concurrence in my opinions as a result of that experience; and any judgment from that plane I shall deem in a great measure unfair.”

Again:

“A subject like the present, pointing towards advancement in the field of medicine, is too sacred to be trifled with by casual and inexperienced criticism.”

After a preface such as this, if we were minded to comply with the author’s wishes, we should not attempt any review of the opinions of the book, but simply confine ourselves to a notice of its publication and its contents.

But the book is too interesting to remain unnoticed for “a year or more” while practising the author’s “experiments,” and it is hardly possible to notice it without making some comments, favourable and unfavourable, upon its statements.

It is obviously the work of a clever, painstaking enthusiast. Having become aware of the pathological importance of eye strain in its various manifestations he has, through a colossal faith in himself and his discoveries, succeeded in producing wonderful effects, partly physical, partly mental, upon those patients who submitted to his “experiments” in a spirit of faith as large as his own.

Dr. Prentice is singularly careless in his use of words and terms; in the same sentence he uses “hyperopia” and “hypermetropia.” He tests refraction with lenses graduated in accordance with the metric system, but tests acuity of vision not in metres but in feet.

He states that “the average acuity of vision is said to be an angle of one minute.” No explanation of this statement is offered.

On the next page he says—

“When the two eyes are fixed so that rays of light falling from a given point are reflected on corresponding localities in the field of vision, a single impression of the object ensues, because each of these corresponding points is supplied with a nerve-filament that leads to a common or single sensory centre.”

Surely this is too loosely expressed, for, beyond doubt, the *field of vision* is not supplied with nerve filaments!

The main contention in this work is, that a very large number of individuals with apparently normal vision and without visible strabismus are really the subjects of errors of refraction or of inequalities in length and strength of one or other of the extra-ocular muscles. That this condition requires an excessive motor impulse to be supplied to certain muscles, and that, in consequence, there results fatigue and irritation of the central nervous system capable of producing symptoms and definite pathological conditions in various peripheral portions of the body.

This condition is to be combated by “repression,” which he defines as “the abatement of an excessive nerve impulse accomplished by reversing a strain.” This he does, for the most part, by means of spherical lenses and prisms—sometimes by tenotomy. He starts with some pathological statements which he regards as axioms. For example: “Disease is localised abnormal innervation, *and always central in the nervous system*, being a lack or excess of motive force.” “Any disease of the eye, other than zymotic or traumatic, and a continuance of even these may depend on eye-strain.”

In his opinion, “so-called cures for dipsomania perform whatever good they effect by temporarily relieving eye-strain.” Again he says: “I am thoroughly convinced that a large percentage of consumption takes its origin from irritation arising through the visual centres, and that many cases, especially in the earlier stages, are amenable to treatment through the same medium.”

Speaking of myopia, he says:—

“In my opinion this defect takes its origin nearly, if not always, as hypermetropia, but the nerve impulse that increases the convexity of the lens to correct the hypermetropia exceeds that office; it passes the point where the refraction would produce clear and

distinct vision, and nearsightedness is the result. It becomes an excessive impulse, fixed or progressive, arising from deranged nerve-centres."

Again:

"Corneal astigmatism is almost always due to the fact that some of the muscles of the eyeball are exerting greater tension in one meridian than another. Wherever corneal astigmatism exists it is fairly safe to conclude that it is due to some muscular strain."

No patent medicine ever claimed to have slaughtered a more extensive and diverse army of diseases than that which Dr. Prentice of Chicago defeated with his panacea, "Repression." On pages 126 to 128 he says:—

"The following tabulated list of clinics has been selected from a large number of cases for the express purpose of showing what class of cases have yielded and may possibly yield to repression treatment."

Then follows the list of those cured by ocular treatment. It contains cases of—

"Ovaritis, with general female weakness; Prostatitis, with inflammation of the neck of the bladder; Insanity, Hay fever, Uric Acid Diathesis, Rheumatism, and General Nervous Debility; Chronic Rheumatism, Asthma, Ovaritis, Diabetes Mellitus, Paralysis Hemiplegia of twelve years' standing cured in one year; Motor Ataxy, Consumption with Nervous Debility which had lasted fifteen years was cured in eight months; Functional Heart Disease, Diabetes Insipidus, Bright's Disease, Anæmia, Insane and Paralysed, Cirrhosis of the Liver of twelve months' standing cured in four months; Melancholia and Sterility, Chorea, Shaking Palsy, Ovaritis and Sterility, Chronic Ulcerative Catarrh, Constipation and Dyspepsia, Sciatica and Uric Acid Diathesis, &c."

"Sometimes" (he says) "we may be fortunate enough to have such marked changes ensue from repression that there will be little uncertainty. I have seen it reduce the heart's action within one hour from 120 to 65, where on the removal of the glasses the heart in a short time would increase to its former standard, and again, with the glasses, be reduced. I have repeatedly seen persistent pains in the back, the ovaries, the stomach, and various other parts relieved within an hour or two, and reproduced by the removal of the glasses or the reversal of the prisms. I have seen the reverse position produce a nervous chill. There certainly is as much mental suggestion in one position of the prism as the other."

The author is certainly convinced that his position is firmly established upon an unassailable, scientific basis, and is not to be mistaken for hypnotism or faith-healing, for he calls it a "philosophy" and expresses a healthy self-satisfaction in the concluding sentence of the book, where he says—

"When the philosophy set forth in this work is more generally understood, it is certain to be generally practised, and its benefits will be shared by many sufferers. For his years of labour, the author deems himself well rewarded by the results already obtained, although he looks upon these results only as the earnest of greater things to come."

Dr. Prentice considers that want of balance between the external muscles of the eye is extremely common—almost invariable, indeed—and he bases this opinion largely upon the evidence of the blind and the dead. He assumes (without any proof whatever), that the position of equilibrium of normal ocular muscles results in parallelism of the "optic axes" (a term he does not define). As all blind people within his observation have had their optic axes deviated in some direction, he concludes that they all had suffered from defective muscular equilibrium. Again, the aimless movements of the new-born infant's eyes, he explains by want of balance in the muscles.

It would seem to us to be better explained by an imperfect development of the co-ordinating centres; for, is it not exactly analogous to the aimless and futile movements of arms and legs, incapable of full co-ordination till the centres are educated? The fact that all infants are born hypermetropic but subsequently many become emmetropic, he explains by saying: "It is the long-continued effort of the ciliary muscle that brings about the emmetropia of later life." But, surely, growth and full development have more to do with this change of shape than spasm of the ciliary muscle. The hypermetropic eye is essentially an imperfectly developed eye.

"Look into the dim windows of the brain," he says, "twenty-four hours after death, and a deviation of the eyes from a perfect position will always be found." The eyes, he says, "naturally fall into the positions the relative lengths (of the muscles) permit them to assume." If the optic axes are not, after death, parallel, he considers that the presence

of defective muscles is proved. But is it fair to lay this down as true of the eyes and not of the limbs? Is an absence of symmetry in the position of the limbs at the time of death a proof of defective muscular development? Even Dr. Prentice could hardly believe this.

Like many other serious writers, Dr. Prentice is, at times, very amusing. With melodramatic effects he tells the following truly fantastic and characteristic story:—

“Several years ago, I was called from a great distance to see a patient, suffering from what was, at times, a severe craving for alcoholic stimulus. During this period, excessive amounts of liquor were drunk, the debauch continuing about one month. His dissipation was as deep as possible. After this followed the period of sobering. Then for three or four months he would again lead a perfectly abstemious life. He was notably kind and generous to the poor; lent great aid to moral institutions; was a kind, good father and husband, and seriously devoted to the church. It was at the conclusion of one of his sprees that I reached his home, too late to see him alive. On the following day, the thought came to me that if eye-strain had had any connection with his infirmity, it, perhaps, might manifest itself after death. So, in the company of his old partner and friend, and two undertakers, I carefully raised his eyelids. The left was fixed in a normal position, the right was turned upwards, fully 22 degrees. Such evidence ought to be sufficient explanation and vindication of many acts that may have incurred censure during life.”

In spite of its obvious faults and inaccuracies this book is well worth reading, and reading carefully, for it is suggestive and invigorating. The absolute cock-sure-ness of the author is most refreshing in these days of hypercritical accuracy, and many grains of pure gold may be obtained from it by washing.

Method of Operating for Cataract and Secondary Impairments of Vision, with the Results of Five Hundred Cases. By SURGEON-CAPTAIN G. H. FINK, H.M. Indian Medical Service. London: J. & A. Churchill. 1894. Crown 8vo. Pp. 77.

THE author has operated upon 1,000 eyes for cataract, but bases his present treatise on 500, which he has tabulated.

He begins with a short historical sketch, then enumerates the instruments required, and the stock solutions, dressings, and other necessaries; then devotes a paragraph to "The Patient and the Operator;" then describes minutely each step in the operation, and finally, the dressing and after-treatment.

He operates, as a routine, with the pupil dilated with atropin. He is eclectic regarding the vexed question of iridectomy, and prefers, if he can, to extract the lens in its capsule without pricking it with a cystotome. Before extraction he syringes out the surface of the eye and the anterior chamber with perchloride of mercury—1 in 10,000—and then everts the upper lid "to widen the palpebral fissure." When the operation is completed, a piece of plaster cut in a special shape, with a drainage slit provided for each canthus, is placed directly over the closed eyelids, and no further dressing applied to the eye till the fourth day, when the plaster splint is removed by moistening it, and a light pad applied in its place. "The plaster is made of blue silk, dipped in a hot solution of (1 in 5,000) bichloride of mercury, and then in a (1 in 5,000) warm solution of gum and bichloride of mercury, which is carefully strained and freed from grit. It is then stretched over a clean board and dried and cut into the proper shape."

Amongst the accidents that may happen during an operation, he mentions prolapse of the iris in front of the blade of the knife. When this occurs he makes an incision in the corneo-scleral line with a keratome, the iris is then drawn away from the knife by a hook, and the corneal incision is completed.

He always tests vision immediately after operation. When it is found defective the hyaloid membrane is at once divided with a cystotome, to avoid the necessity of a secondary operation. This plan he has found so satisfactory that he has never had to perform a secondary operation in any single instance.

The results that he obtained are—successes, 90.6 per cent.; accidents and complications, 6.6 per cent.; and suppurations, 2.8 per cent. He does not, however, specify the vision obtained, or give any definition of the word "successes,"

therefore it is hard to compare his results accurately with those of other operators; but in his hands his method seems to have given most satisfactory results.

General Surgery and Pathology for Dentists. By EDMUND W. ROUGHTON, B.S., M.D. (Lon.), F.R.C.S. Eng., &c. London: J. P. Segg & Co. 1895. 8vo. Pp. 134.

THE object of this book is stated by the author to be, the supplying to a student in dentistry an account of general surgery and pathology sufficiently comprehensive to aid him in his special branch, and at the same time sufficiently concise to enable him to readily take in these subjects while preparing for his examination. There is, we should think, one danger to which a book of this class is especially liable—that is, the tempting a student to take a shallower and more superficial insight into the field of general surgery than perhaps he might have taken were these abridged works unknown.

The dentist of the present day would need to consult more exhaustive works than that under observation, for, although that which the author says is well said, it seems to us that a dental student, supposing him to have but little previous knowledge of surgery, would fail to get a fundamental general idea of his subject from this treatise alone.

The book is divided into sixteen chapters. The first, which treats of inflammation and its sequelæ, gives a clear description of the subject, and its value is enhanced by several diagrams. In many places the author gives definitions—witness here that of “a sinus”—which are very brief, and yet comprehensive. Next follows a description of bacteria, and here it would seem that the author considers dental caries due entirely to the action of these micro-organisms, laying no stress upon the part played primarily by acids. However, further on we see weight *is* laid upon this point. Speaking of bodily temperature, the different scales used—on p. 22 C., p. 30 F., and elsewhere neither specified—would, we think, prove confusing to those for whom the author caters. Here is pointed out the probable similarity of Fränkel’s pneumococcus and the micrococcus of sputum septicæmia, with the possible ætiological relation of mouth organisms to acute croupous pneu-

monia. The subject "Wounds" next receives attention, after which certain surgical febrile conditions are briefly touched upon.

In some seven pages the author tells a great deal about syphilis. Tuberculosis is discussed somewhat briefly, yet the reader cannot fail to carry away from this chapter a good deal of information in a condensed form. The different varieties of tumour receive a relatively large amount of consideration, and from the dentist's point of view, rightly so; several good illustrations of the various microscopic appearances add to this chapter's interest. Under the heading "Nerve Injuries and Diseases," where, perhaps, the dentist would look for much enlightenment, there is but a short description. The nature of the pain in neuralgia, its various treatments, and especially the warning as to the use of analgesics, cannot but be read with advantage. The chief affections to which bone and its membranes are liable exhaust the remaining twenty pages.

The book is tastefully and well got up, while the type is clear and of good readable size.

The Urine in Health and Disease, together with its Chemical Examination. By H. AUBREY HUSBAND, M.B., C.M., B. Sc., F.R.C.S.E., M.R.C.S., L.S.A.; President of the College of Physicians and Surgeons of Manitoba; one of the District Examiners to the New York Equitable and New York Mutual Insurance Societies, &c., &c.; author of "The Students' Hand-book of the Practice of Medicine," "Manual of Forensic Medicine and Public Health," &c., &c. Plates. Third Edition. Edinburgh: E. & S. Livingstone. 1895.

THIS Lilliputian volume has succeeded in attracting so much public attention that it requires but brief notice at our hands. The author informs us, in his preface, that—"The increased demand for this little book has necessitated the preparation of a New Edition within two years. The book has been carefully revised, and much new matter added. The question of Albuminuria in relation to Life Insurance has been made as full as the limits of the book

would permit. Several diagrams of apparatus have been inserted in the text. Of these there are so many modifications that the student is referred to the catalogues of the firms mentioned."

There are ninety-five pages of text in this booklet. Twenty-four woodcut diagrams of urinary deposits—organic and inorganic—follow. The author and publishers have shown their judgment in giving the reader the benefit of a good, large, clear type; the style and diction of the author are extremely concise and lucid; so that the little volume is a genuine *multum in parvo*: it contains a vast deal of concentrated and accurate information. We feel sure that this issue will continue to maintain the popularity of its predecessors. It most certainly deserves to do so; for it is by far the most convenient and reliable pocket-book of reference which we know of on so important a subject. We recommend it most warmly to the attention of the medical student and of the general practitioner.

Elements of Practical Medicine. By ALFRED H. CARTER, M.D., Lond.; Fellow of the Royal College of Physicians, London; Senior Physician to the Queen's Hospital, Birmingham; Visiting Physician, Workhouse Infirmary, Birmingham; Professor of Therapeutics, Mason College, Birmingham; Emeritus Professor of Physiology, Queen's College, Birmingham; Consulting Physician to the Corbett Hospital, Stourbridge; the Bromsgrove Hospital, and the Smallwood Hospital, Redditch, &c. Seventh edition. London: H. K. Lewis. 1895.

THE fact that six large editions of Dr. Carter's manual have been exhausted within fifteen years, is quite sufficient evidence to establish the fact that it has been found one of the most useful of the numerous manuals offered to the attention of the student, as introductory to the study of the practice of medicine. Of the present issue the author says in his preface—"Though the work has necessarily undergone wholesale revision, and substantial re-arrangement, as the advance of knowledge and my further experience

as a teacher of medicine have seemed to suggest, its aim is still the same. Now, as then, the object has been to provide broad truthful sketches of the various types of disease, as distinguished from a mere epitome or compendium of exhaustive treatises. To what extent this ideal has been realised in the present instance, I must leave my readers to judge; but that there is a genuine and legitimate demand for a work of this kind I think every teacher of experience will admit."

There is no doubt whatever—as it appears to us—that the question has been already answered, in the most satisfactory way, by the amount of public patronage which Dr. Carter's manual has long ago succeeded in securing. In the case of the present issue he has left nothing undone to deserve a continuance of the same popularity. He describes, clearly and concisely, the leading characteristics of the principal types of disease; the forms of treatment are indicated with the best judgment. A special feature of the manual is a "therapeutic index" of the outline treatments of the principal diseases. It occupies thirty-one pages, and will be found extremely useful to the student and general practitioner. Following this, is a very good general index—an important feature in every book of reference. We cordially recommend Dr. Carter's handy manual as one of the most useful and reliable of its species.

SEPTENTRIONALIN.

SEPTENTRIONALIN is an alkaloid of aconitum septentrional, discovered by Kobert. In its physiological effects it closely resembles curare, and is recommended as an antidote for strychnin and for hydrophobia.—*Rundschau für Ph.*, No. 20.

THE BOROSALICYLATE OF SODIUM.

THE borosalicylate of sodium— $2\text{C}_6\text{H}_4\text{ OHCOOH} + \text{Na}_2\text{Bo}_4\text{O}_7 + 5\text{H}_2\text{O}$ —is produced by mixing two molecules of the salicylate of sodium with four molecules of boric acid. As an external application Dr. Bernegan gives the following prescription: Rx.—Borosalicylate of sodium, 20 grammes; glycerole of aonica, 40 grammes; lanoline, 18 grammes; vaseline, 22 grammes.—ft. ungt. The salt is soluble in water.—*Les Nouveaux Remèdes*, 1895, No. 5.

PART III. SPECIAL REPORTS.

REPORT ON GYNÆCOLOGY.

By E. HASTINGS TWEEDY, Fellow and Examiner, Royal College of Physicians, Ireland ; late Assistant Master, Rotunda Lying-in Hospital.

THOSE interested in the progress of gynaecology would do well to peruse the June number of the *American Gynaecological and Obstetrical Journal*. This number contains, in a very full form, the Transactions of the American Gynaecological Society, and furnishes an excellent commentary on the progress which has occurred in this special branch of surgical science. As might be expected, the need for operative interference in fibroid tumours of the uterus, and the various methods that are employed in their removal, receives the most prominent consideration.

Dr. Howard Kelly voiced the opinion of most modern authorities when he laid down the following indications for operations :—persistent haemorrhage ; constant pain that cannot be relieved ; a rapidly-growing tumour ; a tumour sufficiently large to cause inconvenience ; an operation is justifiable performed on a patient who is nervous and frightened at her condition. Many other indications could easily be mentioned—as, for instance, malignant degeneracy of the growth, and the interference with labour, sometimes brought about by myomata.

Nothing is more remarkable than the change which has occurred concerning the treatment of these fibroids. We no longer are told that they are harmless ; on the contrary, the more our experience grows the more are we inclined to look on them as constituting a very grave condition.

Nothing now is heard of the treatment by ergot or electricity ; both one and the other, having proved dangerous and non-efficient, have been discarded. Neither has the operation of oophorectomy—or removal of tubes and ovaries—sustained its reputation, but has gradually yielded the fore-

most position to hysterectomy as a means of cure. This latter operation, having undergone probably as many modifications as there are months since its introduction, shows signs at last of crystallising into the method of "total extirpation," whether this be accomplished through the vagina or by means of the abdominal operation.

As regards the relative merits of these two methods, it is unnecessary to say anything. Each has its sphere of usefulness, and they should not be considered antagonistic. There is no question that a wonderful feat of surgery is accomplished when a myomatous uterus, enlarged so as to reach up to the umbilicus, is removed through the vagina. The method of procedure is as follows:—The uterus and tumour are split by a median incision—beginning at the anterior lip of the cervix—into two halves; this division is facilitated by cutting wedged-shaped masses from either side as the operation proceeds. Hæmorrhage is easily controlled by an assistant making steady traction on either lateral mass by means of strong vulsellæ during the progress of the operation. Finally, the masses are dragged through the vagina, and the broad ligaments are either clamped or ligatured *in situ*. The vault of the vagina may now be closed by a few ligatures, or a plug of iodoform gauze, but neither one nor the other is necessary, as the parts themselves close very rapidly, and there is no inclination to intestinal prolapse. That this operation is very safe cannot be doubted. It is accompanied by a less degree of shock than any abdominal operation. No weak abdominal spot is left behind, and the convalescence is amazingly rapid. Against these advantages must be urged, that it is tedious to the operator, and requires a prolonged anaesthesia. We feel sure, however, that the operation will be more and more practised, to the exclusion of other methods, as its merits are more widely understood.

Martin's total extirpation has almost entirely superseded other methods of dealing with large fibroids—those extending above the umbilicus—and we do not exaggerate when we say that this plan affords a means for the removal of these growths, which is attended with no greater mortality than that experienced a few years ago by the most eminent ovariotomists in their now classical operation.

It is gratifying to feel that the Dublin school has kept so well abreast of the times; both these operations have been performed with great frequency within the past two years at the Rotunda Hospital by the present Master, Dr. W. J. Smyly, to whom is due the honour of being the pioneer of both operations, not alone in Ireland, but also in the United Kingdom.

We cannot pass from this subject without calling attention to Dr. Thomas Addis Emmet's valuable paper, which sounds a useful warning against the indiscriminate removal of the uterus because of myomata. He writes:—"Let no one remove the uterus until he has dilated the canal, put his finger in and formed some idea of the position of the tumour." This rule cannot be too urgently insisted on, for many submucous myomas can thus be felt, and removed from their beds without in any way impairing the usefulness of the organs left behind. To accomplish this purpose Dr. Emmet uses strong tenacula and scissors, but those who have employed Schultze's spoon forceps—or, rather, Dr. Smyly's modification of that instrument—will find that they possess a much safer and more ready method of accomplishing the enucleation.

Much work has been done of late in the direction of fixing the displaced uterus in a proper position otherwise than by pessaries, and there is no doubt that the complete disappearance of these instruments (save under the most exceptional circumstances) is but a matter of time.

Of the innumerable operations which have appeared from time to time as a means of compassing this happy state of affairs, none have held their own more completely than that devised and practised by Dr. Alexander of Liverpool. We know of no operation that has been more assailed than this one—"barbarous," "unscientific," "dangerous," "useless," are samples of the expressions used concerning it—and the fact that it is growing year by year in favour, despite so much opposition, speaks highly for its intrinsic value. We find three papers (*Amer. Gyn. and Obst. Journ.*, June, 1895) devoted to Alexander's operation, and men as eminent as Dr. Paul Mundé and Clement Cleveland speak in the highest terms of it—the former, after an experience of 77 cases; the latter, after 83 cases. The discussion which followed the reading of these papers was also, on the whole, highly favour-

able to it. Cleveland, in operating, makes an incision from $\frac{3}{4}$ to 1 inch long, parallel to Poupart's ligament, "from the pubic spine, in the direction of the inguinal canal, through integument and fat down to the fascia of the external oblique. It is rare that an incision longer than an inch is found necessary, even in the fattest subjects. With the tip of the index finger, a point of less resistance, just above the pubic spine is then sought for, and, in most instances, readily found. This is the so-called "intercolumnar cellular membrane," covering the external ring. By separating the incision, by the thumb and index finger, and pressing firmly on either side of the ring upon the pillars, the cellular membrane will be seen to pouch, and, upon cutting through, the proverbial bunch of fat will protrude. This bunch of fat contains the ligament itself, or fibres of it.

By grasping it by forceps and by gentle traction the ligament can readily be isolated, and should be separated from the nerve that accompanies it. It can then, by persistent coaxing, be drawn out of the canal to what is considered the proper length, which in most cases is about four inches. The other side is then operated on in a similar manner.

For a further description of the technique of the operation, as modified by Cleveland, we must refer our readers to the original article. Polk has extended the sphere of the usefulness of this operation, by making it applicable to fixed, backward displacements. In those cases where firm adhesions do not yield to Schultze's method for breaking them down, Polk opens into the posterior fornix, and directly tears through the adhesions, then, having freed the uterus, he completes the cure by Alexander's operation.

In dealing with the treatment for complete prolapse occurring in old women, Mundè considers Fryne's operation an ideal one. The present writer had an opportunity of performing this operation two years ago. He encircled the vagina with buried rings of silk-worm gut, placed at intervals of $\frac{3}{4}$ of an inch from each other, commencing in the neighbourhood of the cervix, and ending close to the vulvar orifice. The little operation was followed by immediate and complete relief, but he, unfortunately having lost sight of the case, cannot speak as to its subsequent result.

"Renal insufficiency in gynæcological cases" is the title of a paper contributed by Dr. J. H. Ethridge. The author deals only with those cases where the kidneys, though normal in structure, yet perform insufficient work. A method, said to be efficient, is given for estimating, in any given case, the amount of solids voided in the urine. "Multiply the last two figures of the specific gravity of the urine by the number of ounces voided in 24 hours and the product by $1\frac{1}{10}$."

The average amount of solids voided in 24 hours is 950 grains, but Dr. Ethridge has found that "women passing only 50 per cent. of the normal amount of urinary solids are very numerous." "Patients suffering from renal insufficiency should be regarded as poisoned patients, and treated accordingly." "They present symptoms varying in intensity according to dosage." "Women passing not to exceed four hundred grains of solids daily, present various degrees of nervous irritability. When the amount is lessened to, say, 300 grains or less daily, the condition of nervousness becomes a very serious semiological factor. Let a patient, passing only the latter amount of urinary solids, take a severe cold and she will develop a bronchitis or a severe neuralgia, or a fresh attack of perimetritis or a pleurisy, or some other malady equally grave. If appropriate diuretics be used in such cases it will be found that the excretion of urinary solids will be increased, thus indicating that they are called in from the tissues that do not contain them normally, and at the same time the urgent symptoms subside."

Dr. Thomas S. Cullen (*Johns Hopkins Hospital Reports*, Vol. IV., No. 7-8) discusses the causes giving rise to four deaths out of five abdominal sections performed between the 18th and 25th days of January, 1893, in the Johns Hopkins Hospital. He writes: "From the fact that the *Staphylococcus pyogenes aureus* (which was the predominating organism) occurred in every case, and, since all the fatal cases took place at one time, the conclusion seems unavoidable that the source of infection was the same in each instance. The technique of the operating room was the same as formerly, save in one particular. The catgut, which had hitherto been placed in 95 per cent. alcohol and sterilised by steam, was very friable, and it was suggested that juniper-oil catgut be

employed. The gut was put into a screw-top glass jar, containing equal parts of juniper-oil and alcohol (95 per cent.), and placed in a steam steriliser for half an hour, on each of three consecutive days. This gut was employed in all the septic cases."

These cases forcibly illustrate the fact that we have not as yet discovered a ligature that can lay any claim to perfection; and a strong, absorbable, and aseptic material to use as such, is still an urgent surgical need.

It is, therefore, with interest we have read the article contributed by Dr. M'Larne (*Trans. Amer. Gyn. Soc.*, 1895), in praise of Dr. Boeckman's method for the sterilisation of catgut. He says: "With many others, I had entirely given up the use of catgut for silk until 18 months ago, when Dr. Edward Boeckman, of St. Paul, presented to the St. Paul Medical Society, his combination steam and dry steriliser, and described his method for the dry sterilisation of catgut; showing at the same time a long series of bouillon and agar-agar cultures of catgut, both before and after sterilisation. By Dr. Boeckman's method, the catgut is cut into desirable lengths, wrapped in waxed paper, then sealed in small envelopes, raised in the steriliser to a temperature a little above 284° F., and kept at that temperature for four hours. All ordinary pus germs are killed at a lower degree of temperature, but the spore bearing germs, particularly anthrax, so common in the intestine of the sheep, from which catgut is manufactured, are killed only by this high and protracted degree of heat. That catgut prepared in this way is sterile, has been proved by innumerable culture tests, as well as by the personal experience of all my friends who have used it."

This is certainly a less expensive method of treating catgut than that of boiling it in cumol, but which of the two will hereafter be found the more efficient in producing sterilisation with a minimum amount of damage to the gut, the present writer is unable to say.

For our part we have always noticed considerable damage accruing to the gut, consequent on the application of dry heat, but then we have not as yet tried the modified plan of placing it in waxed paper, and we look forward to obtain by this method better results than we have had up to the present.

THE LUCAN DAIRY PROCESS

For the Sterilization and Filtration of Milk.

THE paramount importance to everyone of avoiding contaminated milk, especially at times like this, when an epidemic is present in the city, is my reason for calling your attention to the above subject.

In 1893 I undertook to supply to the public

Pure Milk in Clean Vessels from Healthy Cows.

In order to fulfil these conditions I adopted elaborate precautions, of which I now give a brief *resume*.

Cows.	Entirely grass fed in summer. Carefully housed, partly grass-fed, and regularly exercised in winter. Inspected at short intervals by experienced V.S.
Vessels.	Scalped thoroughly by super-heated steam. Lids cleansed by same method. Water used for washing certified by analysis to be safe.
Employees.	Regularly inspected by a Fellow of the Royal College of Surgeons. Suspended from duty on slightest complaint of illness.
Milk.	No foreign substance added. Samples frequently taken from our shops and carts by trustworthy inspectors, so as to check all possible adulteration.
Sterilization and Filtration.	(Patent Process.) Effectuated by passing the milk through a complicated series of filters, the efficiency of which is evidenced by the removal of all sediment from the milk. Then by subjecting the milk to the action of a sterilizer, it is rendered absolutely free from contamination.

R. G. NASH,

24 Parkgate-street, Dublin.

The fact that Mr. Ernest Hart has published reports of no less than 74 epidemics of disease, afflicting 5,044 persons, and caused by pollution of milk, ought to prove, even to the most sceptical, that in drinking carelessly-collected unsterilized milk they run a very serious risk.—*See Brit. Med. Jour., Sept., 1894.*

THE REPORT OF THE EMINENT BACTERIOLOGIST

Dr. EDMOND J. M'WEENEY, M.A.,

Professor of Pathology, University Medical School, and Pathologist to the Mater Misericordiae Hospital, Dublin.

"To the Manager, Lucan Dairy.

"I have frequently and carefully examined the process of sterilization by heat and filtration to which the milk of the LUCAN DAIRY is subjected under Nash's patent process; and I have personally collected many samples of the milk and made a bacteriological examination of them. The process used is **perfectly harmless**, no foreign substance is added, and the **nutritive value of the milk is not in the slightest degree impaired**, while the objectionable sediment, which exists to a greater or lesser degree in all milk is altogether eliminated. The keeping properties of the milk are greatly increased by the process of filtering and sterilization. Coupled as it is with the periodic medical inspection of your employees, and the carefully enforced veterinary examination of your dairy cattle, I consider that your system of dairy supply could hardly be improved upon in point of efficiency and safety.

" EDMOND J. M'WEENEY, M.D., &c.

"27th August, 1894."

PART IV.

MEDICAL MISCELLANY.

Reports, Transactions, and Scientific Intelligence.

INTRODUCTORY ADDRESSES, 1895-96.

MEATH HOSPITAL.

Introductory Address delivered at the opening of the One Hundred and Forty-third Session of the Meath Hospital.
By E. E. LENNON, F.R.C.P.I., L.R.C.S.I.; Physician to the Meath Hospital.

GENTLEMEN,—We are met here to inaugurate the opening of the one hundred and forty-third Session of this Hospital, and in accordance with a time-honoured custom, an address is given by a member of the staff. Following as I do in the wake of so many distinguished inaugural lecturers, it is but natural I should feel deeply sensible of the great honour to which I have been called, and my incompetence to do justice to the position.

As in this address there must be an absence of that “polish” which graced the work of my distinguished predecessors, I can only claim the privilege of a first attempt, and throw myself upon the indulgence of the audience.

Since the previous Session we have to deplore the death of Sir George Porter, one of the most distinguished teachers of surgery which our time has produced. Abler pens than mine have enumerated the honours which were bestowed upon that illustrious surgeon, and to which he was so justly entitled. I shall merely state, therefore, that, like many other celebrated physicians and surgeons of our hospital who have passed away, his memory will be revered, not only for his professional attainments, but also for his kindly and genial disposition.

To fill the position rendered vacant in the hospital by the death of this distinguished baronet was no easy task. In the selection of Mr. Glasgow Patteson the medical staff have, judging by his previous brilliant career, been mindful of the

best interests of the students and the traditions of our hospital. I am confident, therefore, that I express the unanimous wish of the staff and of the students, in tendering to Mr. Patteson their hearty congratulations.

In the continuation of my remarks, I propose this morning to address my observations chiefly to those who are just entering upon their studies, and to those about to qualify.

To those students who are now entering upon their professional education I give a hearty welcome, both to our profession and to this hospital. There is no doubt that in your election to become members of the medical profession you have selected a vocation that is admittedly the most useful and the most honourable you could select. Its benefits and its disadvantages as a life long pursuit you have doubtless duly weighed.

Having, therefore, made your selection, I hope by making this address as practical as possible to give you the assistance which is your due. I shall commence, therefore, by asking you the pertinent question—by what portal do you propose entering the “Medical Register?”

Is it by means of University Degrees or the qualifications of the Colleges?

Here I desire you to note that amongst the learned professions ours is the only one which possesses ambiguity of title. A man when he is called to the Bar is without demur termed a Barrister; a Solicitor is called so the moment he is enrolled; a clergyman is addressed as the “Reverend” upon his ordination. It is reserved for the Medical Profession to be without any suitable title to which all its Members may generically lay claim.

Many of you will say if these learned professions call their members Barristers, Solicitors, and so forth, surely the Members of the Medical Profession may call themselves Doctors. I do not wish, gentlemen, to stagger you with paradoxes, but it is my duty to say that unless you ultimately possess an M.D., you cannot by right designate yourself a Doctor!

This doubtless comes to many of you as a rude shock. To many who have occupied those same benches which you occupy the same awakening has come. The difference

between your case and theirs is, that you hear this fact announced at the commencement of your course, they when it was too late to retrace their steps and take another route. Any of you, therefore, who intend taking the License of the Apothecaries' Society will, upon receiving your diploma, be termed Apothecaries; those who obtain the Licenses of the College of Physicians and Surgeons, Physicians and Surgeons, respectively. These qualifications carry no title save "Mister."

The *Lancet* lays down that M.B.'s are entitled to the title "Doctor"—very illogically, one would think—but I fancy it reconciles the matter by assuming that to obtain the next step of M.D. is merely a matter of form, since many of the universities grant this degree to Bachelors in Medicine upon the reading of a thesis, and, as a secondary consideration, the payment of an additional fee.

Referring to the title of a physician, there even appears to be a doubt if a Licentiate of the College of Physicians is entitled to call himself a Physician, for in a recent number of the *British Medical Journal* it is set forth that only Members and Fellows of a College of Physicians are entitled to this distinction. Assuming this statement to be correct, we must infer that a Licentiate of a College of Surgeons is not entitled to call himself a Surgeon.

Of course I do not accept the *dicta* of these journals, but they indicate the general doubt upon nomenclature of title in our profession. One cannot but wish that as a way out of the difficulty the authorities would reconcile these heterogeneous titles to one class by establishing one common designation for all persons admitted to the pages of the "Medical Register." This is in vogue in the United States, where each practitioner who passes a recognised examination is given an M.D. As can be gathered by what I shall state subsequently, it is the commercial value of the dignity that renders the degree a desirable acquisition. As far as the vanity of individual members of the profession is concerned, I am sure that they are privately quite indifferent in this matter so long as it does not affect either their practice or appointments.

You may say with justice that a man with a license is equal in point of medical knowledge to an M.B., which, as

we have seen, is practically the examination for the Doctorate in Medicine. This I grant, for I hold, as can be confirmed by the Reports of the General Medical Council, that the professional examinations of the Royal Colleges are not one whit less severe or searching than the examinations of the Universities of Great Britain and Ireland. In point of fact candidates for the degrees of the latter are examined by many of the same examiners and in the same subjects as candidates for the diplomas of the Royal Colleges.

It is also true that the Government, when advertising for officers for the medical services, do not insist on candidates being graduates of a University. The controlling Boards of the various Services—naval, military, and civil—feel quite certain that so long as registered medical practitioners fulfil the Board's requirements and pass its examinations, a sufficient guarantee is given that the State secures competent medical officers. Furthermore, it cannot be said that the want of a degree at all interferes with the candidates from the colleges obtaining high places in the competitive examinations.

I have been at some pains to look up the matter, and I find that the men who have obtained the highest places are distinguished mostly by their lack of university distinction. Nor must it be forgotten, as an illustration taken from recent events, that neither of the Chitral heroes—Sir George Robertson and Surgeon-Captain Whitchurch, V.C.—boasts of an university affix to his name.

In such chaos of professional titles as obtains in the United Kingdom, it is no wonder that the public has long since become confused, and in its bewilderment has, especially in England, grasped the idea that the safest index to professional fitness is the possession of the title, M.D. Therefore, till the General Medical Council, with whom legitimately rests the definition of these titles for the guidance of the public, rectify the present confusion, I would recommend everyone who can do so to obtain a university qualification.

So thoroughly has this pre-eminence been given to the title of M.D. that I have known of the candidature of men who were perfectly eligible for appointments set aside through the misconception of Board as to the professional status of

licentiates. Indeed, there are medical men, I regret to say, who favour the misconception of the public in this respect for personal ends.

It is not a matter of fiction that among Poor-law guardians the M.D. has got his supporter to state that he alone is the only doctor among the candidates, and having disseminated doubts as to the legal qualifications of the other candidates has thereby gained the appointment.

That I am not dwelling upon a sentimental question, but one which gravely affects your professional career, can be gathered by a reference to the list of medical appointments. These are gazetted weekly in the columns of the *British Medical Journal*. Taking, haphazard, a copy of this journal for August 24th of the present year, I find that of 20 appointments made, 17 were obtained by University Graduates.

The struggle for existence is so keen in our profession, that if one hopes to rise in it, every legitimate advantage possible must be secured in one's student days. Do not mind the philosophers, who, when this subject is discussed, say that diplomas do not make the man.

This sentiment holds good only if you were considered embryonic Galens. Therefore I would impress upon every student that University Degrees mean a good stock-in-trade, and their possession a matter which none of you will ever regret.

Gentlemen, I will not weary you with admonitions as to the necessity for diligence in study, as you will very soon experience, at the up-to-date examination Boards of the present, that those who are idle and fritter away their opportunities will suffer by rejection, with its consequent loss of time, money, and credit.

I would be glad, though, to encourage every student to enter for the class examinations at the end of the session. The experience to be derived will be of the utmost benefit in accustoming the student to the methods of oral examination before he enters for the professional ordeal ; nor is this the only advantage, for those who secure these Prizes possess honourable guarantees of their practical knowledge, which ought to perform yeoman's service when subsequently they

seek appointments. To those gentlemen who are about to qualify, or are in their last year of medical study, let me urge the desirability of their obtaining a residency in a hospital. Here the student will have every advantage of practice without its responsibility, nor should he overlook the most trifling detail in the management of the sick. The feeding of patients, especially the dieting of children, can here be closely studied. And let me here remark that, in general practice, nothing either pays better than this knowledge, or is more fruitful of good results to the patient.

Indeed, since rational dieting has almost superseded the use of drugs in diseases of the digestive system, an acquaintance with these principles is absolutely necessary. More than two-thirds of your medical cases will be suffering from stomach, liver, or kidney trouble. Upon the skilful feeding of such patients your reputation must greatly depend. And here let me counsel you to eschew the vague directions so commonly given by many physicians. As you are, doubtless, aware, the most hypochondriac of your patients will be the dyspeptic. Written instructions as to what he is to eat and what to avoid, with a few explicit directions as to the cooking of certain foods, will work wonders with this sufferer, both therapeutically and mentally—a sympathetic interest in all the symptoms which he will relate to you, if you can afford the time, will do much to win his confidence.

In many hospitals the house surgeon is expected to lecture the probationers. Should he not be familiar with the proper adjustment of a draw-sheet or the making and the application of a poultice, the want of such knowledge must recoil seriously to his disadvantage. Indeed, if it were only to be above the criticism of nurses already trained, especially those so carefully trained and so familiar with their duties as the Red Cross Sisters—these hints might be worth attending to. Nor should a visit to the hospital pharmacy be considered beneath the dignity of the residents or senior students. In these days, when many medical men dispense their own physic, a practical knowledge of compounding is of enormous advantage to the junior practitioner. There is nothing new in this advice—I mention these hints because I myself have followed them, and have found them of benefit.

The position of the young medical man who has just received his diplomas, no one will deny, is one of peculiar anxiety. He will, in any case, do well if he endeavours to obtain a house surgeoncy as a start. To those gentlemen who find it necessary to at once go into general practice I would like to give a word of warning, so that they may avoid the many pitfalls which beset them. Should they seek an assistancy they must be cautious in the extreme that they are not induced to enter the service of some unqualified man as a "cover," and even into the proposals of qualified men, requiring assistants, they should carefully look, both as to whether the principal's locality is one that they will like, and the amount of work he wishes them to perform not beyond their physical capacity. I have known men waste no mean portion of their small capital going from London or Dublin to remote parts of England to find that the assistancy was not in any sense desirable. Should the junior practitioner desire experience before purchasing a better-class practice, there is little use in his going to a colliery district for such a purpose, or to become assistant to a man who has such a number of club patients that accurate and scientific diagnosis is out of the question, and not at all encouraged by the principal.

Those assistantships known as branch practice assistancies, it is well to note, are practices conducted, in almost all cases, by the assistant alone. The principal, in these cases, taking an interest only in the money receipts. The practice, nevertheless, is conducted solely in the name of the said principal. The work of branch practices is of the most onerous character, and the endurance and energy of the so-called assistant must be beyond fatigue.

Those gentlemen who are eligible for the naval and military services, and whose tastes lie in that direction, cannot do better than read with a view of joining one or other of the services.

The position is in many respects desirable, the work—as a rule—not too laborious, and the remuneration, at least in the junior grades, is more than the average practitioner of similar standing could obtain in civil life.

It must not be forgotten that this pleasing picture of the services has another side. Amongst the objectionable features

may be enumerated:—The want of a definite military rank and title, the certainty of prolonged service abroad, often in very unhealthy districts, with, of course, the accompanying possibility of a complete break-down in health and vigour; the liability to dismissal from employment at the end of twelve years' service on failure to pass the examination for promotion, and the insufficiency of payment in the higher grades.

Amongst minor drawbacks might be mentioned the ill-defined social status of the Military Medical Officer, his apparent ineligibility for membership of Military Clubs, the burthen of an unaccustomed discipline and subordination to authorities, and the too frequent change of station.

To those, however, who have not military aspirations, but who have the means to purchase a practice, I would suggest the advisableness of their becoming assistants to principals, with the view to partnership or succession. This procedure will prevent the young practitioner from being swindled, as the purchase of practices from unknown vendors is a very risky business indeed.

Gentlemen—I take the opportunity afforded me by this address, at this stage, to direct general attention to what has been long felt as a want in our educational system by all who have had experience, either as teachers or investigators in Dublin.

While the various anatomical, physiological, and chemical departments have been brought to the highest stage of perfection by a lavish expenditure of money, and now afford unequalled opportunities to the Dublin student of acquiring the most extended knowledge of these subjects, under the guidance of distinguished teachers, whose lives are devoted to scientific pursuits, the enormous mass of material for pathological and bacteriological enquiry is allowed to go to waste from the lack of a Central Institute where such investigations could be adequately carried out.

Out of many proposals, that which I consider the most feasible is the establishment of such an institution by the Royal Academy of Medicine, based upon the lines of that already founded by the Royal Colleges of Physicians and Surgeons of London.

The Royal Academy of Medicine is representative of every medical organisation—teaching, licensing, or otherwise—in Ireland. It should, therefore, be in a better position than any other body to bring a project of this nature to a successful issue.

In addition to its own funds, annual subsidies might reasonably be hoped for from the Irish Licensing Medical Authorities, University and Collegiate, as well as from the Medical Schools in Dublin and the Provinces.

The pupils of these corporations, in return, would participate in the educational advantages of the scheme.

To the furtherance of a matter so distinctly beneficial to the well-being of the public and the Irish profession generally, no valid objection can be offered.

Nor, again, would it be unreasonable to suppose that the petition of so important a body as the Royal Academy of Medicine for a substantial Government grant to further the objects of such an institution would be overlooked.

The Government has already granted aid for the furtherance of medical investigation in other portions of the United Kingdom. Why can they not do so in Ireland?

Let us enquire what the expenses of a

PATHOLOGICAL INSTITUTE,

conducted on the lines I have indicated would amount to.

The Initial Expenses for Equipment ... £500 0 0
Annual Expenses—

Salary of Chief	...	£600	0	0
Two Assistants	...	200	0	0
Two Porters	...	100	0	0
Rent and Gas	...	200	0	0
Maintenance of Appliances, and Cost of Chemicals, &c.	...	200	0	0
				£1,300 0 0

Total Expense of first year £1,800 0 0

For safety, say £2,000, with an annual expenditure of £1,300.

To meet this expenditure the following suggestions are made :—

The total number of Students requiring Certificates in Pathology, and now attending the three Dublin Schools, would be about 120, at about £3 3s. each for a three months' course. This would amount to ...

£378 0 0

A Grant from the Royal Academy of Medicine

100 0 0

A Grant from the Royal Colleges, each of £50

100 0 0

A Grant from the two Universities—the University of Dublin and the Royal University of Ireland—each of £100 ...

200 0 0

A Grant from University College (the Catholic University) of

100 0 0

A Grant from the Corporation of... ...

300 0 0

(In return for this last all *postmortem* examinations should be made, either at the morgue or elsewhere, by the Chief of the Institute or one of his assistants, free of cost, thus increasing the actual cost to the city by only £100 a year, as the cost of the *post mortems* made at present for the Coroner is about £200 annually).

Add to these items the fees paid by men studying for a diploma in public health—say twenty men annually at £10 each—£200; and we have a total of £1,378, which would be further supplemented by fees paid for *post mortem* examinations of animals by various county grand juries, &c., special courses in bacteriology to men already qualified, fees for examination of various specimens forwarded by practitioners throughout the country who may not be members of the Royal Academy of Medicine; and if to all these a small Government grant were added, the institution could be floated with every prospect of a useful career.

You will say, all this is very fine theorising, but we must not ignore or forget the difficulties. Well, what are the difficulties?

First, there is the necessity for united action on the part

of a number of different institutions, and we all know, from practical experience, how difficult it is to get a number of our countrymen to unite heartily and sink controversies for a common object. Undoubtedly, the difficulty of getting such diverse bodies as the Universities, the Royal Colleges, University College, the Dublin Corporation and the Royal Academy of Medicine to co-operate is great; but it ought not to be impossible.

Each of the teaching bodies wishes to have its own Chair of Pathology, with the result that none of them can be really efficient, as compared with similar institutions in France and Germany. None of them can afford to pay a salary to a Professor sufficient to induce a really capable man to give up his entire time to the work.

When the occupant of one of the chairs, as at present constituted, has made a name for himself, he will be promptly tempted elsewhere by the offer of larger emoluments.

Again, at present, not one of these gentlemen can be adequately supplied with what is absolutely requisite for the proper teaching of pathology now-a-days, namely, an abundance of recent specimens. No one of our Dublin hospitals is sufficient to meet this requirement, it requires the hearty co-operation of all. By having all the specimens brought daily to the Institute, demonstrations could be given every afternoon throughout the session, which all students would be free to attend, and which I know would be largely attended by them.

You may object that it will be impossible to obtain the consent of the present Professors of Pathology to their own annihilation. I do not think that this is so; as a matter of fact their present professorial emoluments are very small, and I do not think it would be difficult to propound a scheme by which they could be either compensated for their retirement or absorbed in the larger Institute.

The difficulties practically, are only three:—

1st. To obtain the hearty co-operation of the various bodies I have mentioned.

2nd. To provide for the existing Professors.

3rd. To obtain the various grants in aid of the work I have already set forth.

No doubt, time will be necessary before all these difficulties can be smoothed over, and, above all, time is the very thing we can least afford.

The University of Dublin has recently appointed to the Chair of Pathology, in its school, Professor Alexander O'Sullivan, a brilliant scholar, a Fellow of Trinity College and an enthusiast in his work. It proposes, I understand, to equip for him a laboratory at considerable expense, as soon as possible. When once this laboratory is established, it will be hopeless to expect that Trinity College will encourage or assist an outside scheme.

The march of events will similarly compel the other teaching bodies to spend their funds on similar equipments, and in place of one great central institution, that would be a credit to the whole country, and which would attract pupils from Great Britain and America, we shall see perpetuated that sub-division and diffusion of energy which has already proved so disastrous. It is the interest of all the medical teaching bodies and licensing bodies alike, that everything should be done by making our schools efficient to attract an ever increasing number of students to our city.

Under our present system, our class is not increasing; it is an open secret that the cause of this is largely the want of concentration in our efforts, and all who have studied the subject will agree with me in saying that a well-conducted Pathological Institute, under the control of an able man, devoting all his time to his work, and with competent assistants under him, would do much to neutralise our present weakness.

Some one may say, why do you venture to suggest that the Corporation of the city should be asked for a grant in aid of such an undertaking; in what way is that body interested in your scheme? My answer is, that the prosperity of the Medical School is of great importance to Dublin. The total number of students in the city is probably about 600, each of whom spends on an average for his maintenance and the payment of his fees about £100 a-year, thus making a total of about £60,000 a-year expended annually by the pupils of the Medical Schools in Dublin. This estimate is probably below the truth; but taking it as an approximation only, can

Dublin afford to lose this sum annually, and see it spent in Edinburgh and London? The extra tourist traffic in Ireland, for the encouragement of which such great efforts have been made lately, probably does not exceed this sum. This is an aspect of the problem that is not usually presented, but it is well worth consideration.

Again, the Dublin Corporation is the local sanitary authority acting through its distinguished officer, Sir Charles Cameron, and is therefore largely interested in all questions affecting the health of its citizens. It is not too much, therefore, to expect that a body, which has already shown such an enlightened appreciation of its position and responsibilities by the large grants it so generously gives every year to the City Hospitals, would readily grasp the importance of such a proposal and its obvious bearing on the health and prosperity of its constituents.

The time for action has come—in the words of Burns' immortal war song—

“Now's the day, and now's the hour.”

The present is an opportune time for discussing the proposition in all its bearings; if postponed until the various colleges have spent their funds in equipment, it will be too late, and nothing will be left but vain regrets for a lost opportunity.

Furthermore, if the several Members of the Academy of Medicine had the privilege of sending their specimens, pathological or clinical, for careful examination, analysis, and report, to such an institute of investigation, the value of such membership would be distinctly advantageous to country practitioners. Many of our brethren who are debarred by distance from participating in the benefits of the Royal Academy of Medicine as at present constituted, would thereby be induced to further swell the List of Members of this distinguished Society.

In addition to other advantages, the benefits of an extensive library could be placed at the disposal of such an institution by the Royal Colleges permitting the members of the proposed organisation to participate in the enjoyments of their respective libraries—a proposal that for the purposes of procuring the maximum benefit of a library at a minimum

cost by the fusion of the two libraries mentioned, might be suggested as a matter of detail.

This proposal I venture to submit to the Profession in the hope that some steps may be taken to enable the Irish School of Medicine to retain the eminence it now holds, and in which the Meath Hospital has borne so honourable a part.

There is one other subject I wish to dwell on briefly—viz., the growing tendency to unprofessional conduct in our ranks—a tendency happily rare in Ireland. The Universities, the Colleges, the General Medical Council, and the British Medical Association, all have endeavoured to find some equitable means of dealing with offenders but without effect.

Since the authorities have failed, there is one, and only one, resource left—that is, to appeal to the individual Members of the Profession to uphold its honourable traditions.

I am confident, therefore, that in the hands of you, gentlemen, who have recently joined our Profession, the reputation of our high calling will never suffer, nor through you will this Hospital feel reproach.

It is possible that occasions may occur in the life-history of each of you when the temptation to take advantage of a professional brother may be great, indeed. In such cases the rule, “Do unto others as you would be done by,” is one which loses nothing by virtue of its antiquity and its divine origin.

To any of you who may think that the rewards of the Profession are inadequate to the many calls which suffering humanity may make upon your time, I would recall the words of Cicero—“That the recollection of a life well spent, and the memory of good deeds, are most pleasant.”

To my younger listeners I would like to say a word in conclusion :—

You are young and buoyant in spirits, and look at most things with the cheerfulness of youth ; but do not forget that all around you here is misery and sadness, and that your duty in after-life, as it is your duty now, is to do all in your power, and you will find in too many cases that that all is very little, to alleviate some of that dreadful total of suffering and sorrow.

As you grow older, and your experience enlarges, you will

find that your estimate of poor suffering humanity steadily rises.

There is no place on earth where grander examples of human courage can be seen than in a Hospital. You will see here men and women, without a murmur, or sign of fear, listening to the words in which the saddened medical man conveys to them that they are suffering from some incurable malady, and that their days are certainly numbered.

Imagine any one of you being told that you would have to undergo an operation of the greatest hazard, necessarily accompanied by prolonged suffering, and a tedious convalescence if successful, and picture to yourself what your feelings under such circumstances would be—yet you will see men and women here cheerfully accepting the prospect, and with a confidence in medical science that approaches the sublime, walk fearlessly into the operation theatre, and place themselves absolutely and without reserve in the hands of the surgeon.

Never forget that around each patient, be he ever so humble or uninteresting, are grouped the hopes and fears of loving friends and relatives. Never forget that what to you is the interesting sarcoma, too often means bitter want and suffering to the widow and the orphan.

There are few of us who have not lost some beloved friend or relative. When you see the sorrow-stricken friends around the bedside of some poor suffering fellow-creature, think of what you felt yourself when someone very dear to you was taken away. Remember that all the patients you see here are suffering, and that all are poor. Go out any cold winter morning to the out-patient department, and add the pangs of bitter weather to those of sickness and poverty, and he must indeed be hardened and devoid of human sympathy who does not feel his heart sad within him at contemplation of all this misery, not a tithe of which he can assuage. You must remember, also, that there is another side to the picture—that the black cloud of sorrow is illuminated by the sunshine of human kindness.

This hospital, and countless similar institutions throughout the world, are maintained by the generous contributions of those whose lot is cast in pleasanter places than that of our

poor patients, but whose hearts are touched by the sufferings which they try so nobly to alleviate.

“One touch of nature makes the whole world kin,” and, thank God for it, in the darkest hours of our country, our wealthier fellow-countrymen have never failed to respond to an appeal for help, and no hospital in Ireland has ever yet had to shut its doors through want of funds.

ST. VINCENT'S HOSPITAL.

A Proposed Change in the Method of Advanced Medical Education.^a By RICHARD F. TOBIN, F.R.C.S.I., Surgeon to St. Vincent's Hospital.

ALTHOUGH I see that many not belonging to the medical profession have honoured us with their presence at this the opening of the session of our school, I shall not hesitate to ask you, one and all, to consider with me, during the short time I shall detain you, some questions of medical education. Or, perhaps, it would be more correct to say that I find in such good company, not an obstacle, but an incentive to talk on professional topics. The incentive would be complete could it only be arranged that that part of my audience to whom I am referring should just, for the next quarter of an hour, be so troubled with bodily ailments that the proper education of physicians and surgeons would seem to them the one real subject in this world worthy of consideration. When in health men are inclined to think that the progress of medicine is altogether the concern of physicians—“It is their business,” it is said; “every discovery is an addition to their stock-in-trade—the profit is theirs, let them look to it.” But, gentlemen, when Plutus views our field of work, it is not in the area that science has cleared and where simplicity prevails that he sees his harvest, but rather in those un-reclaimed regions where the blind lead the sick through a jungle of nostrums. For as civilisation advances, side by side with wealth there grows an intolerance of suffering, and these conditions, taken in conjunction with the ignorance that prevails about disease, cause patients not

^aThe Introductory Address delivered at the opening of the Session of 1895-96, at St. Vincent's Hospital, on Tuesday, October 15, 1895.

to be deterred by the remoteness, doubtfulness, or costliness of the quest from wandering in search of remedies.

But it may be urged against making medical education the subject of an introductory address—"This question is threshed out." That it has been fully and ably treated I allow, and notably by colleagues of my own, but the fuller the reaped harvest, the more gleaning there is to be done, and although I may not be able to throw any new light on this most important question, I have a hope that the consideration and criticism which my remarks may call forth will not fail to do so. When addressing a mixed audience it is necessary to state one's case with a fulness that to some members of it must be wearisome. Most of us are personally acquainted with the position of medical education to-day, many of us with it as it was, in what I may call its glacial epoch, so fast are we advancing. Now it is systematised, then there was no system. Medical food was then served out very much as a hen-wife gives food to chickens, all in a lump. Now a student is made sit down to a well arranged *table d'hôte*, and so anxious are the waiters that he should dine well that they will not remove his plate till he has fully partaken of the course before him. This advance from confusion to system has been, I need not say, like other advances, one of development. And since in the most highly developed animals we find processes, such as the appendix of the cæcum, which had no doubt a use in their time, but which now only furnish work for the surgeon, we need not be surprised if, in the system of teaching medicine, there survive methods useful once, but now only a hindrance to the exercise of its higher functions.

The curriculum, as at present arranged in our schools, stands thus:—It extends over five years, and cannot be entered on till the student has passed an examination intended to show that the word liberal is applicable to his previous education. During the first two years he is almost altogether occupied with the study of sciences that form the foundations of medicine—viz., anatomy, physiology, physics and chemistry. These are commonly spoken of as medical studies, but here, for the sake of

clearness, I shall try and limit that adjective to the healing art. During the second year he is obliged to attend hospital, and many students wisely do so from the very first, but this is only a sort of preparatory attendance. During the third year he is liberated, in a great measure, from the study of the accessory sciences, and so during this year he can give a great deal of attention, and during the fourth and fifth year he can give his whole attention, to medicine and surgery proper.

It thus appears that there are two stages in the curriculum—a preliminary scientific stage, and a stage devoted directly to medical problems. It is with this second stage that I, as a hospital teacher, am most concerned, and the question that I ask you to consider with me to-day is this—Does the student spend his time during this second stage to the best advantage? As far as I can see he does not. For, in place of being relegated to the hospital for his training during this second period, he is obliged to attend the schools for theoretic lectures in medicine and surgery, and for examinations in connection with these lectures, and these examinations so dominate his views that he spends his time in hospital, not watching the changes in his patients, but on the look-out for ready-made answers to questions. If urged to make records of cases, he does so reluctantly, for he knows that, from an examination point of view, it does not pay, and if, towards the conclusion of his course, he is offered the position of resident pupil in a large and busy hospital, he often refuses it, because he is going in for his "final," and, of course, the one thing essential is to pass. His medical education, therefore, notwithstanding a large amount of hospital attendance, is literary rather than practical.

I hold that the literary education of a medical student should be as full as circumstances will permit, but I also hold that literature—even medical literature—does not cultivate the whole plain of the intellect, and that it leaves practically untouched that portion of it in which the physician must gather his fruits—I mean the field of observation. Education, as it is at present understood, helps us to many things, amongst others to this—it enables us more or less to

conceal our shortcomings. Perhaps it is on this account that men in a civilised country appear to the casual observer a very even lot. Some may be enabled by the gift of music, painting, or literary skill, to distinguish themselves amongst their fellows, but, as a rule, we live by appearances, and it is most difficult to demonstrate or ascertain what a man is made of; what is his intrinsic worth, and especially to what extent he possesses that quality, than which no other makes him so useful to his fellow-man—I mean the power of original observation. It is not so amongst people for whom the problems of life are not made complex by civilisation. When it depends on a man's own unaided powers whether he shall die of hunger or cold, be devoured by wild beasts, or lose his way in the trackless wilderness, the question of what he is, as distinct from what he appears to be, is quickly answered. The man of appearances vanishes from the scene. We, therefore, find in uncivilised and nomadic tribes that not only does each individual possess quick perception, but that the degree in which he possesses this quality is well known to his fellows. For instance, if in some remote part of India or Africa you enter a village and ask for some one to help you in hunting big game, the man most suitable for your purpose is at once forthcoming. What he will do for you is amazing. An animal has been wounded, and it disappears in the jungle. He rushes forward and follows it, as if it were still in sight. You stick to him as best you can. When he pauses you ask him—"Are you sure we're right?" He perhaps only answers "See! See!" and starts on again. And he will, with marvellous precision, follow that wounded animal either till he overtakes it, or till it is evident that pursuit is hopeless. If questioned as to how he does it, he is at a loss to say. His methods are so ingrained in him that they belong to his instinct rather than his reason, but by much watching and asking you can reach many of them. I need not tell you that to follow an animal that is dropping blood at every step, or that has crossed a fresh sandy plain, is an easy task. But the expert tracker will follow one that leaves no blood-stains, and along paths as full of foot-

prints as are the flags in Grafton-street. He will tell you how long it is since it passed, the rate at which it had been travelling, and whether it was going lame or sound. Every up-turned particle of dust, every broken twig, every cropped blade of grass has appearances that tell him the exact moment when it acquired its characters. Looking at the distance between the footprints, and noting an irregularity in one, he may remark it is lame, but it is going fast ; and, later on, see, it halted here and looked round, and so on through details that would weary you. Suffice it to say that he can read from the surface of mother-earth all the incidents of a long chase as clearly as any of us may read the incidents of a hunt in an evening paper.

From our lives here civilisation has almost completely banished the necessity for observation. Our complex system requires a sub-division of labour ; and each one gladly shifts from himself the trouble of judging and seeing. Moreover, education, as at present conducted, teaches us to see with the eyes of others rather than with our own. Consequently there is, coincident with the advance of culture, a general depreciation of acuteness of perception, and some of our faculties so atrophy from want of use that were we suddenly shifted back into a primitive state, many of us would rank as imbeciles and speedily perish. I do not think that this is an exaggeration. For have we not reached a stage when, provided a man has sufficient observation to recognise his own hat and umbrella in his club, he can carry on very well. Some cannot pass even this low standard, and yet they prosper. But pray, Mr. Chairman and Gentlemen, do not think that I want to depreciate civilisation unduly, or to throw in my lot with "narrow foreheads ignorant of our glorious gains." No ; I am here rather to appeal to the broadest foreheads amongst you, and to ask you to think out for me the question I am submitting to you. I have not a word to say against the man who fails to recognise his own umbrella or knocker, and who has to ask a policeman the way at every turn, provided he does the work he is appointed to do efficiently. But I would ask him not to

forget that his powers of observation have not been developed by whatever system of education was applied to him, and that although he may be able to get on well as he is, there may be professions other than his, of which observation is the very essence. No dangers may await him now-a-days because he lacks acuteness of perception, but there may result much loss of life, and much suffering and sorrow, because others following other avocations are so wanting.

Out of such criticism as I have applied to the present state of medical education there naturally arises the question—Can regulations alter the conditions complained of, and make students look on books as only secondary sources of knowledge? And the answer is, Most assuredly they can. They have but to apply to the teaching of medicine and surgery the principle that has been applied to the teaching of all other arts and sciences—that is, the principle of making theoretic and practical work go hand-in-hand. The one should be made to wait upon and illustrate the other; or, to take a lesson from physiology, theory should not move independently, but should, like the blood, be made to flow through the whole system, and to nourish and vivify every part. But the non-medical portion of my audience may ask—What is to prevent such circulation going on at present? The plain answer is—Nothing but the regulations. The regulations order that the theory of medicine and of surgery is to be condensed each into a course of fifty lectures, to be given in schools which are in reality schools of anatomy, physiology, chemistry and physics, and they refuse to recognise systematic theoretic lectures given in hospitals in conjunction with practical work; and, further, the regulations are armed with a revolver in the shape of examinations, which enforces the obedience of students. Nothing else could keep alive such a system—one which, as it were by violence, keeps theory and practice apart.

If it is acknowledged that a student should be relegated to a hospital for his medical and surgical training, it follows, as a corollary, that his hospital teachers should have a voice in his qualifying examinations.

Examinations have a two-fold use—they compel the attention of a student to a particular course of study, and they gauge his knowledge. It is evident that medical examinations should keep both these objects in view, for I think you all agree that knowledge obtained by the observation of cases is deep, abiding, useful, and, in a true sense, educational, compared with that which is reached altogether through words. It is also evident that to do so they must, at least in part, be conducted by the person or persons in whose hands was the regulated course of study that preceded the examination; for such persons alone can have knowledge of the particular incidents constituting the education in question. Of course assessors from the Licensing Body, whose qualification the student sought, should attend such examinations. It would, in fact, be a conjoint examination, conducted in part by the Teaching and in part by the Licensing Body; and, while it would be on the report of its own representative that the latter would grant its licence, it would have the satisfaction of knowing that such report had been drawn up after consultation with men who had had almost daily opportunities of testing the candidates' capabilities.

Such, gentlemen, are the changes in the method of conducting medical education for which I ask your consideration and criticism. They do not seem revolutionary or difficult to carry out, but their effects would, I believe, be far-reaching. The objections are chiefly two, and they have been so fully answered by Dr. McHugh in a lecture dealing most admirably with this subject, that I need only mention them. The first is that the clinical teaching in hospitals is not sufficiently full and systematic to warrant the abolition of theoretic lectures in the schools. But why is it not full and systematic? Simply on account of these very lectures. Although they are only fifty in number for medicine and for surgery, they are supposed to complete the education of the student in these most extensive subjects; and so hospital teachers, relieved from the responsibility of giving systematic instruction, tend "to walk the wards" with their pupils in a rambling and drifting fashion. The abolition of the one kind of teaching means the reformation

of the other. It means a full course of teaching instead of a partial one, and a broader and better platform for the professors who at present fill, and most ably fill, the various chairs of medicine and of surgery. The second objection is that hospitals do not possess museums, such as are attached to some of the schools, the specimens of which are useful in illustrating lectures. I answer this by saying, that in hospitals you have specimens of both life and death; of men and of parts in which disease is active, and of men and of parts in which it has done its work. In this Hospital—although we do not go so far as does the establishment of a friend of mine who lately told me that in his hospital they make a *post-mortem* on every case; here, although not reaching such a wholesale slaughter—we have, alas, only too abundant opportunities of studying the morbid anatomy of all ordinary forms of disease. Moreover, it is studied in cases, the stages of which the investigator had watched during life. Surely this is no small matter—this direct lesson in cause and effect. Note also, before we pass on, one other superiority of hospital teaching as compared with museum teaching in this branch of study. In the former there is proportion; it is proportionate to the occurrences of life. In the latter there is none. For a museum, as we all know, abounds in curiosities and despises common things. It is a place to go to complete one's knowledge, but not to lay its foundations.

Mr. M'Ardle, in a lecture which he delivered here this time last year, took on himself, and I need not say ably discharged, the truly patriotic but somewhat thankless task of contrasting the position of the Dublin schools with that of more prosperous rivals. His statements were severely criticised in some quarters at the time; but surely since they cannot be gainsaid, it is more manly and sensible to inquire into the cause of the difference than to turn away from it. Anyhow, try as we may, we cannot shut out the fact that schools, not far from us, attract not only their own countrymen, but our countrymen and crowds from foreign lands. Nor can any one assert that such is the case here. It cannot be said, for instance, that as you walk round Stephen's-green or College-green you have

to make way on the foot-paths for Australians, Americans, Hindoos, Japanese, as you would have to do in the neighbourhood of the chief schools in Scotland or Germany. Why is this? It is due to a fact which diverts to these other countries, not only medical traffic, but tourist traffic, and other kinds of traffic—the simple fact that they in some particular things attend better to their business. For instance, who has been to Vienna or Berlin without being struck by the efforts they make there, to systematise clinical teaching and to cater for the wants of all comers. If you attend an out-patient clinique are you not surprised by what appears the miraculous turning up of cases that exactly illustrate the subject that is on that particular day being taught? But if you are allowed to linger on after the show the miracle is explained. You will see the teachers going round and giving to such of the patients as had come, not for treatment but to show themselves, a sum graduated according to the rarity of the ailment; and so far is this carried, so much can a person with a rare and interesting, and perhaps not troublesome, ailment earn, often visiting three or four classes in one day, that he comes to look on his affection as a veritable God-send. And which of us also, gentlemen, to take another view of the matter, has been around the said schools, and has been behind the scenes, getting an insight not only into the excellences, but also into the shortcomings of the various systems, without saying to himself, and feeling in his heart, "How much better we could do this at home if we only tried." Let us try. We have it in us to do as well as any if we try. Let us try to make our schools fill a position in the world's eye, and so leave them less dependent than they are now "on the prices at Ballinasloe."

In trying to do so, there is, I think, one principle we should keep before us. It is, that the business of the licensed teachers is to teach, and that the only measure of teaching is the change wrought in the pupil by the teacher. This is not a truism, but a recondite truth that has long remained unrecognised by many of those whom it most concerns. When I was a student it was so little recognised that we never went near the licensed teachers

at all. It was considered to be the duty of the professors to lecture, and of the grinders to teach, so we paid the fee for the lecture, but we attended the grind. One of the few professors who disapproved this system was the late Mr. Jacob, and he was easily irritated by any allusion to it. There is a story of a guileless youth, who, ignorant of his peculiarity, stopped him in the college yard one day and asked him—"Are you Professor Jacob?" and, having made sure of the identity of the strange face, followed it up with the request that he should sign for him a certificate of six months' attendance at lectures. It is scarcely necessary to state that the interview terminated abruptly. Another proof that it has often not been recognised, is the fact that many a man who has taught most successfully as a grinder has utterly failed to do so on being made a professor. Such a one has, no doubt, thought that, on being promoted, it was not so much his duty to teach as to give a set and rounded discourse.

I know that now-a-days much of this is changed, that attendance at lectures is compulsory, and that many professors so fully recognise the responsibility put on them by the double tribute of time and money, which the regulations enable them to exact, that they fully teach their subject and leave no need for private tuition except for slow and inattentive pupils. But is this the case all round? Do not the pupils of some professors fail in unusual numbers? Are not the pupils of others compelled to learn their work, not from the licensed professor but from private tutors? Is it not a common thing to hear professors recounting absurd answers given at examinations by their own pupils, answers showing, if they show anything, that such professors have failed in being intelligible? And when the pupil of any professor fails, is not the failure set down altogether to the pupil, and is he not forced by the regulations to pay the full pecuniary fine of his failure in the shape of a fee for re-examination? Nay, until recently, was he not compelled to go back and pay a second fee for further training to his accomplice in the failure?

If this aspect of the education question is well looked

into, I think it will yield good results ; for it should always be borne in mind that the councils and committees who draw up the regulations are representative of us, the teachers, and not of the students, and that, although it may be true that students have in them a double dose of original sin, it is also a fact that professors are not immaculate. Value it is that attracts students. How familiar to us all is the student's question, " Does he give value ? " Cheapness is, of course also important, but it is secondary, and is included in the word value. Surely most men before beginning medicine have grasped the great economic maxim, that " This is a world where you get nothing for nothing, and deuced little for a halfpenny."

But, gentlemen, I am wandering from my main point—the advisability of making hospital teaching a true education, by relegating students altogether to the hospitals during their second period of study.

I return to it merely to leave it in your hands, and to give my opinion that, since Dublin possesses teachers and facilities for teaching second to none, it should be foremost in carrying out such a reform. What developments clinical study so situated is capable of, I shall not say. I would leave that with confidence to the initiation of the Boards of the various hospitals, and to the students, who, whatever it may have been in the past, are to-day as a body really intent on learning.

Students of St. Vincent's Hospital, let me in concluding, address to you a few remarks. I ask you, in the first place, not to wait for any change of regulations, but, as many of your predecessors have done, at once to make for yourselves a true definition of education, and to carry that definition into practice. Let learning wait upon observation. While never forgetting that in the matter of learning you are " the heirs of all the ages," and that, as doctors, you will be expected to give your patients the benefits of your inheritance, keep still more carefully in mind—for here the educational regulations fail you—that without cultivated powers of observation, no mere book-knowledge can be turned to use.

When you are brought face to face with cases, and can see

nothing in them, do not be dismayed. Attack them boldly, set about examining them systematically, and record your observations accurately. Do not shirk this last detail, though at times it may be irksome and appear to you useless, for there is no other exercise which will more surely clear away that haziness of mental vision, so fatal to all progress.

Get into the habit of guiding yourselves by your own observations, and when you see a blind man making his way with a stick through the streets, lift your hat to him and hand him a sixpence for the lesson he is giving you.

But why weary you with words when I can refer you for guidance, both in education and in conduct, to a great life that has just closed—that of one whose discoveries have revolutionised surgery, and who was a student to the day of his death. Search out wherever you can the particulars of Pasteur's life; they will tell you of a man, kind, simple, reverent, and unselfish; not jealous of others; ignorant of nothing but his own greatness; with a child-like piety, with assiduously-cultivated powers of observation and an untiring industry in watching and recording every incident likely to throw light on the problems he put himself to solve.

Such men are rare, whether it is that they are rarely born, or that they do not come to development and to light, owing to conditions which put a premium on quite different qualities. Therefore, let us keep Pasteur and his ways fresh in our memories. Let us, as he did, educate every faculty we possess, and put them modestly and unreservedly at the service of our fellow-men, with this certitude checking materialistic pessimism, and cheering us under all conditions—WE CAN DO GOOD.

DIPHTHERIA.

M. LÖEFFLER, at the International Congress at Budapest, recommended the following local application for diphtheria: R.—Toluol, 36 centim.; metacresol, 2 centim.; menthol, 10 grammes; alcohol, to make 100 centim.—mix. To be applied with cotton wool to the diseased membrane.—*Repertoire de Pharm.*, No. 10.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

President—JAMES LITTLE, M.D., F.R.C.P.I.

General Secretary—WILLIAM THOMSON, F.R.C.S.I.

SECTION OF SURGERY.

President—Sir W. THORNLEY STOKER, F.R.C.S., President of the Royal College of Surgeons in Ireland.

Sectional Secretary—KENDAL FRANKS, F.R.C.S.I.

Friday, March 15, 1895.

The PRESIDENT in the Chair.

Varicocele Nævus and Varicose Veins of the Leg.

MR. CHARLES BALL read a paper on the arrest of bleeding by sutures in special reference to the operations for varicocele nævus and varicose veins of the leg.

In varicocele the mass of spermatic veins is separated from the vas deferens, a clamp forceps is applied above and below, and the entire mass is excised “en bloc.” The cut surfaces are now brought together by a very fine continuous suture passed all round the cut extremities and the ends firmly knitted together, the forceps is now removed, and if any bleeding takes place additional sutures are put in. No ligatures whatever are used, reliance must be placed altogether on the sutures to stop bleeding, as in the operation for hare-lip; by this method the spermatic circulation is occluded altogether, the vitality of the testes being provided for by the deferential arteries and veins. Union between cut extremities of the veins effectually braces up the testicle. In a period of five years this operation had been performed nine times with complete cure by primary union, no case of recurrence being met with.

In nævus a number of needles are passed under the growth, each of which is threaded with boiled silk. An elastic ligature passed round under the needles temporarily arrests bleeding, the nævus is excised down to the needles; the elastic ligature is now removed, the needles pulled through and the silk sutures firmly knotted; in this case also bleeding is controlled by the sutures, if sufficient are put in and union takes place rapidly.

In varicose veins of the leg an incision is made over the portion to be removed, two pair of catch forceps applied to the vein, which is divided between them and dissected up to each angle of the incision. Boiled silk sutures are now passed under the entire length of the wound, the ones at each angle closed completely controlling the vein, which is cut away close to the sutures; a fine continuous suture is applied to the margin of the wound, and the remaining deep sutures are closed. Here again no ligatures of any kind are applied to the veins.

THE PRESIDENT thought that papers dealing with practical matters of detail of this sort were of more interest than the capital subjects of surgery. With regard to the question of the avoidance of ligatures, he agreed with Mr. Ball. Quite recently he had written a paper, published in the *Dublin Journal of Medical Science*, on operations on veins. He thought that sutures were better avoided in superficial operations which have to do with veins. Mr. Ball's passage of a ligature under the varicose vein is practically a soft ligature by acupressure. The President did not approve of the removal of large portions of veins. He would prefer several operations over a limited area. He has done hundreds of operations for the cure of varicose veins, and both he and his colleagues have given up large operations on veins. He agreed with nearly all Mr. Ball said on operations for varicocele. In that case pressure applied by a pad low down over the loose scrotum is not suitable. His own practice is to excise from half to one inch of the pampiniform plexus, pass a sterilised catgut ligature round the stump, and ligature the cut ends. He only tied the ligature round the stump tight enough to stop haemorrhage. The part did not then necrose, and no slough was left. One great difficulty was the exact ligaturing of the skin of the scrotum, owing to the inversion of the skin, produced by the dartos muscle. He had learned a plan from the late Mr. Stapleton, of Jervis-street Hospital. It was called a *post-mortem* suture, and was passed from the deep surface to the skin. This produces eversion.

MR. BENNETT bore testimony to the success of the cases mentioned by Mr. Ball. What he thought of most importance was his method of dealing with naevi. If the naevus were only the size of a shilling there was no necessity for cutting it out. Two ligatures could be passed at right angles, with an elastic ligature round them, and the little tumour contracted to nothing in a week. But in a large growing naevus in a young child what was to be feared was the loss of blood during the performance of the operation. By Mr. Ball's method no blood was lost. It was a much

superior method to the different coloured strings adopted by Erichsen.

DR. S. M. THOMPSON highly approved of deep sutures. Secondary haemorrhage was not nearly so liable to occur, and the dressings could be left on for a considerable time.

MR. KENDAL FRANKS entirely agreed with what Mr. Bennett had said about nævus. He had never tried Mr. Ball's method, but hoped he would have an opportunity of trying it shortly. It was a new method. He did not think there was so much novelty in the other matters mentioned in this paper. He did not think there was ground for the terror which some people had for a drainage tube. Where there is considerable loss of substance beneath a wound, he generally preferred to insert a drainage tube after suturing the skin, and to apply pressure. In the majority of cases, however, he thought the deep suture the best. In breast operations, and above all in amputations, he thought the deep suture the ideal method. He preferred the President's method of operating on varicocele to Mr. Ball's. With regard to operations on varicose veins, he did not see any difference between putting a ligature under the vein and tying it over the skin and tying it under the skin. It is quite unnecessary to remove large portions of veins. He thought that the success of operations on varicose veins depended on the after treatment. If the patient is allowed to walk about without any support to the limb, when the wound is healed, superficial veins will often enlarge. The patient must wear an elastic bandage or stocking for 4 to 6 months, until the collateral circulation through the deep veins is effected. As the deep veins lie between muscles, if they become varicose, it does not signify.

MR. THOMSON thought Mr. Ball's treatment of nævus was the most important practical suggestion. It seemed to him that the ligature had been put upon its trial. Mr. Ball had abandoned the term ligature for suture, but he maintained that Mr. Ball was only ligaturing the veins in another way. He thought his results were not due to this particular form of suture. Some of Mr. Ball's methods were neater methods, but not better in their absolute results.

MR. TAYLOR had seen a good many of the cases operated on by Mr. Ball. In the operation for varicocele, the catching of the veins by the forceps flattened them out, and so there was a good broad line of union on suturing. The shortening of the cord was important, because if the testicle was allowed to drop back into the scrotum it would draw on the cord and cause a recurrence of the pain, which is always present in cases of varicocele. He thought

a very good way of closing the scrotal wound was to draw the angles of the wound apart, and put in a continuous suture. Since he had been to Vienna he was more than ever in favour of deep sutures.

MR. BALL, replying, said that the President had used the terms "necrosis" and "slough" as being practically synonymous terms. He did not agree with this. A necrotic part becomes a slough when it becomes septic. The more necrotic tissue, as ends of veins, that is present in a wound, the more likely is it to become septic. A certain amount of necrotic tissue can be absorbed, but the less there is in a wound the better. In varicocele, by suturing the cut veins together, there are no necrotic ends formed, as would have resulted had they been ligatured. In operating for varicose veins on the legs, he removed several small sections. In that operation the suture is like a ligature in that it surrounds the vessel. This, however, is not the case in the operations for nævus and varicocele. In the operation for varicose veins of the leg, he thought his method of introducing the ligature was easier, and certainly it was easier to take out. It also dispensed with two pieces of catgut lying inside, and any operative technique which enables a surgeon to dispense with dead matter in a wound is an advance.

New Operation for the Cure of Rotation Inwards of the entire Limb.

MR. SWAN read a paper on this subject. [It will be found at page 290.]

THE PRESIDENT, commenting on Mr. Swan's paper, thought that his theory of a descent back into lower forms of animal life very interesting, and quite in conformity with the explanation of many deformities.

The Section then adjourned.

SECTION OF PATHOLOGY.

President—DR. J. A. SCOTT.

Sectional Secretary—MR. J. B. STORY.

Friday, April 5, 1895.

The PRESIDENT in the Chair.

Microscopical Section of a Rare Tumour.

DR. PARSONS read a paper on the above subject.

DR. M'WEENEY thought the growth was justly called a cylindroma, but that it did not belong to that class which occurred

from hyaline degeneration of the blood vessels; because the hyaline strands were very closely placed together, and there were very few cells. Unless it was assumed that there was an angiomatic proliferation of the capillaries, which afterwards underwent hyaline degeneration. Hyaline spots and strands were often met with in sarcomata, but not nearly in so great number as in this case. He had himself seen only one case of cylindroma. It occurred in the hard palate, and was adherent to the bone. It was removed six times, recurring each time.

DR. PARSONS agreed with Dr. M'WEENEY that the tumour must first have been very vascular. It was three years since the tumour was removed, and he had not seen the patient since.

Fibro-myxoma of Tongue.

DR. M'WEENEY showed this specimen, which was an encapsuled, translucent yellowish tumour, about the size of the kernel of a hazel nut, removed by Mr. CHANCE, at the Mater Misericordiæ Hospital, from the tongue of a man, aged twenty-three, who exercised at intervals the occupation of a prize-fighter. No history of syphilis, either congenital or acquired. A swelling had been noticed for some time on the dorsum of the tongue, to the left of the middle line and about an inch from the tip. The tumour came away at once, being quite free from adhesion to the surrounding structures. Histologically examined after fixation in Foà's reagent, it proved to be a fibroma, with here and there so much structureless or faintly fibrillated ground-substance as to justify the name myxoma. In the middle were several lacunar spaces filled with red blood corpuscles and coagulated albuminous material. They were evidently dilated lymph spaces into which haemorrhage had taken place. In the neighbourhood of other places where there had been small haemorrhages, numerous cells laden with golden pigment, as well as extra-cellular pigment granules, were seen. Most of the nuclei in this growth were spindle-shaped, some being very wavy in outline, but here and there were patches of epithelioid cells with vesicular nuclei. Mitoses were not seen. The rarity of fibro-myxoma occurring in the tongue was mentioned.

MR. CHANCE said it occurred in a fine muscular young fellow. He noticed a lump coming on the side of his tongue four months previously. He went to a doctor who opened it, but it did not get smaller. It was not inflammatory, and was very easily removed. There was no specific history.

**Congenital Dentigerous Tumour of the Neck.*

DR. M'WEENEY also showed this specimen, which was removed by Mr. Chance from the left side of the neck of a girl, aged twenty-three. The tumour, which was small at the time of birth, had increased steadily until, at the time of operation, it had attained the dimensions of a good-sized orange. It was subcutaneous, with deep attachments, and sprang from the level of the hyoid bone, to which it was adherent by a sort of process. To the naked eye it seemed made up of a dense fibroid stroma, in which were embedded numbers of cysts, averaging the size of a pea, filled with mucoid material. The trabeculae between these cysts were dense and thick, and contained many bars and nodules of cartilage, as well as several immature-looking teeth. Numerous patches of dark pigment were also seen on the cut surface. Histologically the cysts were lined with epithelium, high-columnar in some, cubical in others; the nucleus in the former case being close to the basal attachment of the cell, the protoplasm clear and hyaline. In one cyst cilia could be made out with difficulty on the epithelium. The cartilage was mostly of the hyaline variety, and though in places slight fibrillation of the ground-substance was made out, there was no approach to reticular cartilage present. The bone was mostly in the shape of hollow cylinders enclosing a quantity of adipose tissue. It was always provided with a distinct periosteum. In the growth were also calcified corpora amylacea and other structures of doubtful nature. Congenital tumours of the neck were not uncommon, but were mostly either purely cystic or purely cartilaginous—cystic hygromata or cervical auricles. This was a rare example of a combination of both forms. Its origin from a branchial arch and the literature of the subject were discussed.

MR. CHANCE said it was peculiar from a surgical point of view. It turned the angle of the jaw outwards, causing considerable deformity. Its removal was difficult. It was firmly attached to the surrounding structures, quite unlike an ordinary glandular tumour. But the main difficulty in removing it was that, from an æsthetic point of view, the incision had to be inconveniently placed under the jaw, and was of small size.

Orbital Tumour.

MR. ARTHUR BENSON and DR. GRAVES communicated the notes of a case of orbital alveolar sarcoma in a man, aged fifty-five. The growth seemed to start from the region of the lachrymal sac,

and was about the size of a small hen's egg, hard and lobulated. It protruded forwards in the region of the left lacrymal sac, and over it the skin was tense, thin, and adherent on the apex. The eye was protruded forwards and outwards to a considerable extent. The fundus of the eye was normal, and the motions of the globe but little impaired. The tumour was surrounded by an imperfect capsule, and the bones at the nasal duct, superior wall, and apex of the orbit were bare and eroded as if absorbed by the pressure of the tumour, which extended back to the apex. After removal, the eye returned almost to its normal position, when the wound healed.

DR. GRAVES, who examined the tumour microscopically, reported it to be a large round-celled alveolar sarcoma, with, in one place, near its anterior surface, a pigmented patch.

DR. M'WEENEY entirely agreed with the diagnosis made by Dr. Graves. He had himself lately examined a similar tumour removed by Dr. Werner. In his case, however, the greater part of the tumour consisted of fibrous tissue, with here and there islets of sarcomatous cells, with an alveolar arrangement. At first sight, without the history, the specimen would suggest a carcinoma, but he was of opinion that it was a large, round-celled, alveolar sarcoma.

DR. PARSONS thought it was probably an example of alveolar sarcoma. But the diagnosis was very difficult. The alveolar structure was seldom present in sarcomata, but was always present in cancer. The only way to be absolutely sure would be to find whence the tumour grew.

MR. BENSON, replying, said that at first Dr. Graves was uncertain as to the diagnosis, and it was only after examining a series of sections that he came to the conclusion that it was an alveolar sarcoma.

Fatal case of Sarcoma of Ear.

MR. STORY described a fatal case of malignant disease of the middle ear, the first he had observed in 18 years, during which period over 12,000 aural cases had come under his observation at St. Mark's Hospital. The patient was a young man about thirty years of age, from whose middle ear a polypus was removed in September, 1894. Foetid otorrhœa was present and had existed some two months, with intense pain in the head. The polypus returned again and again after removal, necrosis of part of the temporal bone showed itself, and all the glands of that side of the neck became involved. Paralysis of the 7th nerve, with difficulty in deglutition and speech supervened, and the patient finally died

of weakness within six months after the removal of the first polypus. Prof. Scott showed microscopic sections of the tumour in the ear, and of a secondary growth in the neck, both of which he regarded as sarcomatous.

MR. BENSON said he saw the case before the present diagnosis was arrived at, and the idea of malignant growth had never occurred to him. At that time it looked very like a severe case of mastoid implication, as a sequence of middle ear disease.

DR. M'WEENEY called attention to the presence of large masses of oat-shaped cells, without any intercellular substance. Also that the tendency of these cells was to tail off into the connective tissue which surrounded the entire mass. This seemed to point to rodent ulcer, but there were no cell nests.

MR. STORY, replying, said that before the microscopical examination was made he thought it was probably an epithelial growth. This was based on the view that carcinomatous growths spread more by the lymphatics than by the blood vessels. After the first gland had been scraped out and the incision made into the swelling below the apex of the mastoid, the case remained quiescent for some time, but then one by one the lymphatic glands of that side of the neck began to be involved. The patient died, not from perforation of the malignant growth into the cranial cavity, but from weakness, with difficulty in deglutition, which came on simultaneously with the loss of speech. The only septic matter observed all through the case came from the meatus in connection with the diseased bone.

DR. SCOTT, in reply to Dr. M'Weney, said that he might have raised another objection, namely, that it was simple granulation tissue. The masses of tissue he got were very small, but were taken from different parts, and it was likely that it was a big cancerous mass. The whole growth seemed to be essentially a growing mass of cells. The cells were somewhat epithelial in character, but he believed that it was a sarcoma and not a carcinoma.

IODIDE OF POTASSIUM MIXTURE.

DR. SPENCER recommends the following prescription: R.—Iodide of potassium, 30 grammes; am. cit. of iron, 4 grammes; tincture of nux vomica, 8 grammes; tincture of quinine, 120 grammes; distilled water, 30 grammes.—mix. A teaspoonful in water after each meal.—*Corr. Ph. f. schweiz. Aerzte.*

SANITARY AND METEOROLOGICAL NOTES.

Compiled by J. W. MOORE, B.A., M.D., Univ. Dubl.;

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VITAL STATISTICS

For four Weeks ending Saturday, October 5, 1895.

The deaths registered in each of the four weeks in the sixteen principal Town Districts of Ireland, alphabetically arranged, corresponded to the following annual rates per 1,000:—

TOWNS	Weeks ending				TOWNS	Weeks ending			
	Sept. 14.	Sept. 21.	Sept. 28.	Oct. 5.		Sept. 14.	Sept. 21.	Sept. 28.	Oct. 5.
Armagh -	21·0	28·0	0·0	7·0	Limerick -	16·8	28·1	26·7	14·0
Belfast -	17·7	21·2	20·2	20·0	Lisburn -	12·8	12·8	4·3	42·6
Cork -	18·0	22·1	19·4	17·3	Londonderry -	14·1	18·8	20·4	18·8
Drogheda -	17·6	17·6	17·6	8·8	Lurgan -	22·8	18·2	4·6	18·2
Dublin -	25·1	21·6	24·2	20·4	Newry -	20·1	12·1	32·2	16·1
Dundalk -	4·2	16·8	12·6	20·9	Sligo -	15·2	10·2	10·2	10·2
Galway -	18·9	49·1	18·9	11·3	Waterford -	25·0	20·0	12·5	25·0
Kilkenny -	4·7	23·6	14·2	9·4	Wexford -	9·0	22·6	9·0	22·6

In the week ending Saturday, September 14, 1895, the mortality in thirty-three large English towns, including London (in which the rate was 15·4), was equal to an average annual death-rate of 19·3 per 1,000 persons living. The average rate for eight principal towns of Scotland was 16·9 per 1,000. In Glasgow the rate was 17·4. In Edinburgh it was 15·8.

The average annual death-rate represented by the deaths registered during the week in the sixteen principal town districts of Ireland was 20·2 per 1,000 of the population.

The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2·4 per 1,000, the rates varying from 0·0 in eight of the districts to 4·7 in Kilkenny—the

only death registered in that district being caused by enteric fever. Among the 93 deaths from all causes registered in Belfast are 3 from scarlatina, 1 from typhus, 2 from whooping cough, 2 from simple-continued fever, 2 from enteric fever, and 4 from diarrhoea. The 12 deaths in Limerick comprise 2 from scarlatina.

In the Dublin Registration District the registered births amounted to 192—101 boys and 91 girls; and the registered deaths to 170—75 males and 95 females.

The deaths, which are 8 above the average number for the corresponding week of the last ten years, represent an annual rate of mortality of 25·4 in every 1,000 of the population. Omitting the deaths (numbering 2) of persons admitted into public institutions from localities outside the district, the rate was 25·1 per 1,000. During the first thirty-seven weeks of the current year the death-rate averaged 29·6, and was 2·0 over the mean rate in the corresponding period of the ten years, 1885–1894.

Twenty-five deaths from zymotic diseases were registered, being 10 over the number for the previous week, but 8 below the average for the corresponding week of the last ten years. The 25 deaths comprise 1 from small-pox, 1 from scarlet fever (scarlatina); 3 from influenza and its complications, 3 from whooping-cough, 4 from enteric-fever, and 12—7 infants under 1 year old, 4 children aged 1 year and under 5 years, and 1 adult—from diarrhoea (being 5 below the average number of deaths from that cause in the corresponding week of the last ten years). The death from small-pox is that of a female aged nine months unvaccinated.

The number of cases of small-pox admitted to hospital was 9, being 5 over the admissions in the preceding week. Three small-pox patients were discharged, and 18 remained under treatment on Saturday, being 5 over the number in hospital at the close of the preceding week. No convalescent patients remained in the South Dublin Union Small-pox Hospital, Kilmainham, at the close of the week.

Twenty-one cases of enteric fever were admitted to hospital, against 10 admissions in the preceding week and 17 in the week ended August 31. Eleven enteric fever patients were discharged, 3 died, and 62 remained under treatment on Saturday, being 7 over the number in hospital on that day week.

The hospital admissions included, also, 21 cases of scarlatina, being an increase of 14 as compared with the admissions in the preceding week. Seven patients were discharged, 1 died, and 82 remained under treatment on Saturday, being 13 over the number in hospital at the close of the preceding week.

Seventeen deaths from diseases of the respiratory system were registered, being 7 over the number for the preceding week, but 1 below the average for the 37th week of the last ten years. They consist of 12 from bronchitis, 3 from pneumonia or inflammation of the lungs, and 2 from croup.

In the week ending Saturday, September 21, the mortality in thirty-three large English towns, including London (in which the rate was 16.0), was equal to an average annual death-rate of 19.8 per 1,000 persons living. The average rate for eight principal towns of Scotland was 18.5 per 1,000. In Glasgow the rate was 19.6, and in Edinburgh it was 18.1.

The average annual death-rate in the sixteen principal town districts of Ireland was 21.6 per 1,000 of the population.

The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 2.4 per 1,000, the rates varying from 0.0 in eight of the districts to 4.5 in Wexford—the 5 deaths from all causes registered in that district comprising 1 from whooping-cough. Among the 111 deaths from all causes registered in Belfast are 3 from scarlatina, 1 from whooping-cough, 2 from enteric fever, and 9 from diarrhoea.

In the Dublin Registration District the registered births amounted to 242—104 boys and 138 girls; and the registered deaths to 148—77 males and 71 females.

The deaths, which are 11 under the average number for the corresponding week of the last ten years, represent an annual rate of mortality of 22.1 in every 1,000 of the population. Omitting the deaths (numbering 3) of persons admitted into public institutions from localities outside the district, the rate was 21.6 per 1,000. During the first thirty-eight weeks of the current year the death-rate averaged 29.4, and was 1.9 over the mean rate in the corresponding period of the ten years, 1885–1894.

The number of deaths from zymotic diseases registered was 21, being 11 below the average for the corresponding week of the last ten years, and 4 under the number for the previous week. The 21 deaths consist of 1 from small-pox, 2 from scarlet fever (scarlatina), 2 from typhus, 1 from whooping-cough, 1 from simple-continued fever, 2 from enteric fever, 1 from infantile cholera, and 11—5 infants under 1 year old, 4 children aged 1 year and under 5 years, and 2 adults—from diarrhoea, being 6 under the average number of deaths from that disease in the corresponding week of the last ten years. The death from small-pox is that of a boy aged 5 years,

who had no medical attendant during his illness: he is stated to have been vaccinated.

The weekly number of cases of small-pox admitted to hospital, which had risen from 4 in the week ended September 7 to 9 in the following week, fell to 5. One small-pox patient was discharged, and 22 remained under treatment on Saturday, being 4 over the number in hospital at the close of the preceding week.

The number of cases of enteric fever admitted to hospital was 11, being 10 under the admissions in the preceding week and 1 over the number in the week ended September 7. Ten patients were discharged, 1 died, and 62 remained under treatment on Saturday, being equal to the number in hospital on that day week.

Twelve cases of scarlatina were admitted to hospital. This number shows a decline of 9 as compared with the number of cases of the disease admitted in the preceding week, but is 5 over the admissions in the week ended September 7. Eight patients were discharged, 1 died, and 85 remained under treatment on Saturday, being 3 over the number in hospital at the close of the preceding week.

Twenty-two deaths from diseases of the respiratory system were registered, against 17 in the preceding week, and an average of 18 in the 38th week of the last ten years. They consist of 9 from bronchitis, 12 from pneumonia or inflammation of the lungs, and 1 from croup.

In the week ending Saturday, September 28, the mortality in thirty-three large English towns, including London (in which the rate was 18.2), was equal to an average annual death-rate of 21.0 per 1,000 persons living. The average rate for eight principal towns of Scotland was 17.5 per 1,000. In Glasgow the rate was 19.4, and in Edinburgh it was 15.0.

The average annual death-rate represented by the deaths registered in the sixteen principal town districts of Ireland was 20.9 per 1,000 of the population.

The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 3.2 per 1,000, the rates varying from 0.0 in ten of the districts to 8.1 in Newry—the 8 deaths from all causes registered in that district comprising 2 from diarrhoea. Among the 106 deaths from all causes registered in Belfast are 5 from scarlatina, 2 from whooping-cough, 1 from simple continued fever, 4 from enteric fever, and 9 from diarrhoea. Of the 28 deaths in Cork 1 was from enteric fever and 1 from diarrhoea. Among the 19 deaths in Limerick are 1 from whooping-

cough and 1 from diarrhoea. The 13 deaths in Londonderry comprise 1 from whooping-cough, 1 from enteric fever, and 3 from diarrhoea.

In the Dublin Registration District the registered births amounted to 156—77 boys and 79 girls; and the registered deaths to 166—83 males and 83 females.

The deaths, which are 1 over the average number for the corresponding week of the last ten years, represent an annual rate of mortality of 24.8 in every 1,000 of the population. Omitting the deaths (numbering 4) of persons admitted into public institutions from localities outside the district, the rate was 24.2 per 1,000. During the first thirty-nine weeks of the current year the death-rate averaged 29.3, and was 1.9 over the mean rate in the corresponding period of the ten years, 1885-1894.

Twenty-seven deaths from zymotic diseases were registered, being 6 over the number for the preceding week, but 1 under the average for the 39th week of the last ten years. They comprise 2 from small-pox, 1 from measles, 2 from scarlet fever (scarlatina), 1 from influenza, 4 from whooping-cough, 2 from enteric fever, 1 from choleraic diarrhoea, 12—6 infants under 1 year old, 3 children aged 1 year and under 5 years, and 3 adults—from diarrhoea (being 4 under the average number of deaths from that disease in the corresponding week of the last ten years), and 1 from dysentery. The deaths from small-pox are those of a man aged 32 years and of a woman aged 24 years, both of whom had been vaccinated.

Only 2 cases of small-pox were admitted to hospital, being 3 under the admissions in the preceding week, and 7 under the number admitted in the week ended September 14. Four small-pox patients were discharged, 2 died, and 18 remained under treatment on Saturday, being 4 under the number in hospital at the close of the preceding week.

Seventeen cases of enteric fever were admitted to hospital, being 6 over the admissions in the preceding week, but 4 under the number admitted in the week ended September 14. Nine patients were discharged, 1 patient died, and 69 patients remained under treatment on Saturday, being 7 over the number in hospital at the close of the preceding week.

The hospital admissions included also 12 cases of scarlatina, being equal to the number of cases of that disease admitted during the preceding week. Eighteen patients were discharged, 1 died, and 78 remained under treatment on Saturday, being 7 under the number in hospital on that day week.

Only 14 deaths from diseases of the respiratory system were registered, being 8 under the number in the preceding week and 4 below the average for the 39th week of the last ten years. They comprise 5 from bronchitis, 6 from pneumonia or inflammation of the lungs, and 1 from pleurisy.

In the week ending Saturday, October 5, the mortality in thirty-three large English towns, including London (in which the rate was 15.9), was equal to an average annual death-rate of 19.4 per 1,000 persons living. The average rate for eight principal towns of Scotland was 18.3 per 1,000. In Glasgow the rate was 18.4, and in Edinburgh it was 16.5.

The average annual death-rate in the sixteen principal town districts of Ireland was 19.4 per 1,000 of the population.

The deaths from the principal zymotic diseases registered in the sixteen districts were equal to an annual rate of 2.1 per 1,000, the rates varying from 0.0 in eight of the districts to 5.0 in Waterford—the 10 deaths from all causes registered in that district comprising 1 from enteric fever and 1 from diarrhoea. Among the 105 deaths from all causes registered in Belfast are 4 from scarlatina, 1 from whooping-cough, 1 from diphtheria, 1 from simple continued fever, 3 from enteric fever, and 6 from diarrhoea. The 25 deaths in Cork comprise 1 from enteric fever and 1 from diarrhoea. The 12 deaths in Londonderry comprise 1 from scarlatina and 2 from diarrhoea.

In the Dublin Registration District the registered births amounted to 202—116 boys and 86 girls; and the registered deaths to 143—67 males and 76 females.

The deaths, which are 10 under the average number for the corresponding week of the last ten years, represent an annual rate of mortality of 21.3 in every 1,000 of the population. Omitting the deaths (numbering 6) of persons admitted into public institutions from localities outside the district, the rate was 20.4 per 1,000. During the first forty weeks of the current year the death-rate averaged 29.1, and was 1.8 over the mean rate in the corresponding period of the ten years, 1885-1894.

Only 14 deaths from zymotic diseases were registered, being 13 below the average for the corresponding week of the last ten years, and also 13 under the number for the previous week. They consist of 1 from small-pox—that of a woman aged 32 years, who had been vaccinated—2 from scarlet fever (scarlatina), 1 from influenza, 1 from whooping-cough, 1 from cerebro-spinal meningitis, 2 from infantile cholera, and 6 from diarrhoea. The deaths from

diarrhoea show a decline of 6 as compared with the number for the preceding week, and are also 6 below the average for the 40th week of the last ten years.

Eleven cases of small-pox were admitted to hospital against 2 admissions in the preceding week, and 5 in the week ended 21st September. One small-pox patient was discharged, 1 died, and 27 remained under treatment on Saturday, being 9 over the number in hospital at the close of the preceding week.

The number of cases of enteric fever admitted to hospital was 15, showing a decline of 2 as compared with the admissions in the preceding week. Five patients were discharged, and 79 remained under treatment on Saturday, being 10 over the number in hospital on that day week.

Twenty-one cases of scarlatina were admitted to hospital against 12 in each of the two weeks preceding. Eleven patients were discharged, 1 died, and 87 remained under treatment on Saturday, being 9 over the number in hospital on that day week.

Deaths from diseases of the respiratory system, which had fallen from 22 in the week ended 21st September, to 14 in the following week, rose to 27 or 7 over the average for the corresponding week of the last ten years. The 27 deaths comprise 13 from bronchitis, 8 from pneumonia or inflammation of the lungs, and 1 from croup.

METEOROLOGY.

Abstract of Observations made in the City of Dublin, Lat. 53° 20' N., Long. 6° 15' W., for the Month of September, 1895.

Mean Height of Barometer, - - - - -	30.102	inches.
Maximal Height of Barometer (on 20th, at 9 a.m.),	30.420	"
Minimal Height of Barometer (on 10th, at 9 p.m.),	29.494	"
Mean Dry-bulb Temperature, - - - - -	57.5°.	
Mean Wet-bulb Temperature, - - - - -	55.4°.	
Mean Dew-point Temperature, - - - - -	53.6°.	
Mean Elastic Force (Tension) of Aqueous Vapour, - - - - -	.411	inch.
Mean Humidity, - - - - -	87.3	per cent.
Highest Temperature in Shade (on 2nd), - - - - -	72.0°.	
Lowest Temperature in Shade (on 22nd), - - - - -	43.0°.	
Lowest Temperature on Grass (Radiation) (on 22nd), - - - - -	37.0°.	
Mean Amount of Cloud, - - - - -	42.2	per cent.
Rainfall (on 7 days), - - - - -	.543	inch.
Greatest Daily Rainfall (on 4th), - - - - -	.184	inch.
General Directions of Wind, - - - - -	S., S.W., W.	

Remarks.

As in both 1893 and 1894, September proved a favourable month throughout. The most remarkable feature in the month was the stability of an anticyclone over Central and Western Europe, while cyclonic conditions held in the far North and North-west, especially at the beginning. The high pressure system was accompanied by clear skies, quiet weather, and at times an extremely large diurnal range of temperature. In France and Germany tropical heat prevailed during the greater part of the month, and in England also the thermometer ranged unprecedentedly high. There were eight days on which the maximum in the shade recorded in London reached or exceeded 80°, the highest reading of all being 86° on the 24th. In Dublin the heat was tempered by a sea breeze, but the amount of bright sunshine was above the average, and the mean amount of cloud was only 42.2 per cent. Towards the close of the month heavy dews and dense night fogs became very prevalent.

The three warmest Septembers experienced in Dublin of late years have been—1865 (M. T. = 61.4°), 1890 (M. T. = 59.6°), and 1895 (M. T. = 59.1°).

In Dublin the arithmetical mean temperature (59.1°) was as much as 3.3° above the average (55.8°); the mean dry bulb readings at 9 a.m. and 9 p.m. were 57.5°. In the thirty years ending with 1894, September was coldest in 1886 and in 1882 (M. T. = 53.0°), and warmest in 1865 (M. T. = 61.4°). In 1880 the M. T. was as high as 58.6°; in 1879 (the “cold year”) it was 54.3°; in 1887, 54.0°; in 1888, 54.4°; in 1889, 55.8°, or exactly the average; in 1890 it was as high as 59.6°; in 1891, it was 57.6°; in 1892, 54.5°; in 1893, 55.9°; and in 1894, 53.8°. So warm a September as that of 1890 had not occurred for a quarter of a century, and this month was only half a degree (0.5°) cooler.

The mean height of the barometer was 30.102 inches, or 0.192 inch above the corrected average value for September—namely, 29.910 inches. The mercury rose to 30.420 inches at 9 a.m. of the 20th, and fell to 29.494 inches at 9 p.m. of the 10th. The observed range of atmospheric pressure was, therefore, .926 inch—that is, a little more than nine-tenths of an inch.

The mean temperature deduced from daily readings of the dry bulb thermometer at 9 a.m. and 9 p.m. was 57.5°, or only 1.3° below the value for August, 1895. Using the formula, *Mean Temp. = Min. + (max. — min. × .476)*, the mean temperature was 58.7°,

or 3.2° above the average mean temperature for September, calculated in the same way, in the twenty-five years, 1865-89, inclusive (55.5°). The arithmetical mean of the maximal and minimal readings was 59.1° , compared with a twenty-five years' average of 55.8° . On the 2nd the thermometer in the screen rose to 72.0° —wind, S.W.; on the 22nd the temperature fell to 43.0° —wind, calm. The minimum on the grass was 37.0° , also on the 22nd.

The rainfall was only .543 inch, distributed over 7 days—the rainfall and rainy days were thus considerably below the average. The average rainfall for September in the twenty-five years, 1865-89, inclusive, was 2.176 inches, and the average number of rainy days was 14.7. In 1871 the rainfall was very large—4.048 inches on however, only 13 days. On the other hand, in 1865 only .056 inch was measured on but 3 days. In 1888, the rainfall was only .728 inch on 10 days; in 1889, 1.043 inches fell on 13 days; in 1890, 2.469 inches on 14 days; in 1891, 2.132 inches on 18 days; in 1892, 2.631 inches on 19 days; in 1893, .729 inch on 14 days; and in 1894, only .442 inch on 8 days.

High winds were noted on seven days, and attained the force of a gale on two occasions in Dublin—the 10th and 11th. Lightning was seen on the 23rd. The atmosphere was foggy on the 2nd, 15th, 19th, 22nd, 23rd, 24th, 27th, 28th, and 29th.

During the week ended Saturday, the 7th, the weather was fine and hot on the Continent and in the South and East of England until Friday night, changeable in Ireland, Scotland, and the North of Europe generally. The heat became intense in France and Germany in the middle of the week—the thermometer rising in the shade to 94° in Paris on Tuesday, and to 91° in Berlin on Wednesday. On the night of this day a destructive thunderstorm accompanied with torrents of rain and hail (1.18 inches) passed over Lisbon (Portugal). A similar storm occurred on Friday, the rainfall being 1.58 inches. In London the daily maxima were 76° , 80° , 80° , 75° , 74° , and 75° —up to Friday inclusive. In Dublin Sunday and Monday were very fine days—the thermometer rose to 72° on Monday. Then followed a period of changeable, cloudy, and at times rainy weather lasting until Friday. Saturday proved beautifully fine—bright and warm. In the evening a lunar halo was visible. The distribution of atmospheric pressure which determined the weather just described was mainly anticyclonic over France, Germany, and the southern half of England, cyclonic to the northwestward of Ireland, in Scotland, and over Scandinavia. On Tuesday, however, a shallow thunderstorm depression passed

northeastwards from the Bay of Biscay across Southern England to Denmark. It caused severe thunderstorms in England, but very little rain fell. On Friday night and Saturday morning violent thunderstorms and heavy rain prevailed over the S. and E. of England. In Dublin the mean height of the barometer was 29.973 inches, pressure decreasing to 29.819 inches at 9 a.m. of Monday (wind, S.W.), and increasing to 30.133 inches at 9 p.m. of Saturday (wind, W.). The corrected mean temperature was 59.2°. The mean dry bulb temperature at 9 a.m. and 9 p.m. was 57.5°. On Monday the screened thermometers rose to 72.0°; on Friday they sank to 50.9°. The rainfall was .476 inch on five days, .184 inch being measured on Wednesday and .180 inch on Monday. The prevalent winds were S.W. and W.

Taken as a whole, the weather of the week ended Saturday, the 14th, was favourable. Until Monday evening an anticyclone stretched from Central Europe across England to the east of Ireland. There was, on Sunday morning, a baric maximum of slightly more than 30.20 inches over the greater part of England, and in that country a complete circulation of light anticyclonic winds existed. In Ireland the wind was moderate from S.S.E. and S. The thermometer rose to 76° in the shade in London and at Loughborough, to 70° at Parsonstown, and to 69° in Dublin. Monday was still warmer—the maxima being 83° in London, 82° at Loughborough, 80° at Oxford, 79° at Liverpool and Cambridge—in Dublin, 72°, the air being close and oppressive in the afternoon. Throughout Tuesday, the barometer fell fast in Ireland and Scotland as a deep depression approached the latter country from W.S.W. The centre of this system passed across the North of Scotland on Wednesday morning, the barometer falling to 28.99 inches at Nairn at 8 a.m. Fresh S.W. to N.W. gales set in on the Irish and British coasts and temperature gave way, with falls of rain or passing showers. By Friday the barometer had entirely recovered from its depression, and another anticyclone was passing eastward over the southern half of the British Islands. At 8 a.m. its centre lay over the extreme S.E. of Ireland, the barometer reading 30.31 inches at Roche's Point, Cork Harbour. Fine, quiet, but at times cloudy weather held to the end of the week. In Dublin the mean height of the barometer was 30.010 inches, pressure ranging from 29.494 inches at 9 p.m. of Tuesday (wind, W.S.W.) to 30.305 inches at 9 p.m. of Saturday (wind, E.). The corrected mean temperature was 58.5°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 57.7°. On Sunday the screened thermometers fell to 48.2°; on Monday they rose to 71.8°. The

prevailing winds were at first S., afterwards W.N.W. Rain fell on two days to the amount of .063 inch, .039 inch being measured on Tuesday. Temperature was very low over Central England on Saturday morning—41° at Loughborough at 8 a.m.

During the week ended Saturday, the 21st, very fine weather prevailed for the most part in Ireland, England, and on the Continent. In Scotland and Scandinavia conditions were unsettled and a good deal of rain fell. At both the beginning and the close of the period an anticyclone of considerable intensity lay over England, Ireland and France. These high-pressure systems were accompanied by fine, quiet, weather—temperature alone being unstable, rising very high by day and falling very low at night. In Paris on Thursday the minimum was 45°, the maximum 83°—range 38°. Heavy dews fell by night, and at times a good deal of fog hung about the coasts. On Tuesday a low pressure area skirted the N.W. of Ireland, passing northeastwards to Scotland and thence travelling eastward to the south of Sweden. This disturbance caused strong and squally S.W. winds as it approached, but in its rear the wind veered to N. and fell light, with a clearing sky. On Thursday much cloud covered England and drizzling rain fell tolerably widely over that country. In Ireland, however, the weather was fair and bright. Friday was brilliantly fine: on the morning of this day the isobar of 30.40 inches embraced the east of Ireland, the Irish Sea, and the central and eastern parts of England. The first frost of the season was reported from Sweden at this time, the thermometer falling to 30° in the screen at Haparanda. At Oxford the thermometer fell to 38° in the screen and to 31° on the grass. Saturday was fine, but cloud increased in Ireland, where the barometer was lower than of Friday. In Dublin the mean atmospheric pressure was 30.236 inches, the extremes being—highest, 30.420 inches at 9 a.m. on Friday (wind, E.N.E.); lowest, 29.959 inches at 9 a.m. of Wednesday (wind, W. by S.). The corrected mean temperature was 57.2°. The mean dry bulb reading at 9 a.m. and 9 p.m. was 56.2°. On Tuesday the thermometer rose to 67.8° in the shade, on Saturday it fell to 46.7°. A slight shower fell on Wednesday afternoon, but it yielded no measurable rainfall. The prevailing wind was westerly.

Splendid weather—dry, bright, and unusually warm—held throughout the week ended Saturday, the 28th. On Monday night, indeed, a severe thunderstorm passed northwards across the centre and west of Ireland from Roche's Point to Malin Head, but this electric disturbance caused no lasting break in the weather. A large anticyclone hung over Central Europe all through the

period, and, as it were, a wave of high pressure swayed westwards across the British Isles and France from time to time. At the beginning of the week the air was calm and the sky was clear. Hence the diurnal range of temperature was extremely large—even in Dublin on Sunday the thermometer in the screen ranged from 43° to 64° and on Monday from 44° to 67° . But these variations fade into insignificance when compared with those recorded at Loughborough (Leicestershire). At that inland station the diurnal range was on Sunday from 33° to 74° and on Monday from 39° to 81° . On Tuesday the heat in England became intense, the thermometer rising to 86° in London and at Loughborough, and to 84° at Cambridge. Over England, as a whole, the maximum temperature of Monday was from 19° to 13° above the average for September and even this excess was outdone on Tuesday. A light southerly air-current was the bearer of this great heat, which had first shown itself in France. The nights were warm after Monday. A good deal of haze and fog hung about towards the close of the week, especially at the coast stations and over the sea-channels. The highest Irish temperatures recorded were 76° at Parsonstown on Thursday and 77° on Friday. In Dublin the mean height of the barometer was 30.195 inches, pressure falling from 30.305 inches at 9 a.m. of Sunday (wind, S.S.E.), to 30.104 inches at 9 p.m. of Tuesday (wind, S.S.W.), and rising again intermittently to 30.266 inches at 9 a.m. of Saturday (wind, N.). The corrected mean temperature was 60.2° . The mean dry bulb reading at 9 a.m. and 9 p.m. was 58.6° . On Sunday the screened thermometers fell to 43.0° ; on Thursday they rose to 70.8° . The prevalent wind was southerly. No rain fell in Dublin.

Sunday, the 29th, was at first calm, with heavy dew and a dense fog in Dublin. The weather afterwards became brilliant. Monday, the 30th, was also summerlike.

The rainfall in Dublin during the nine months ending September 30th amounted to 20.876 inches on 130 days, compared with 10.968 inches on 112 days during the same period in 1887, 17.992 inches on 131 days in 1888, 19.936 inches on 147 days in 1889, 20.855 inches on 151 days in 1890, 18.020 inches on 135 days in 1891, 19.910 inches on 150 days in 1892, 15.108 inches on 122 days in 1893, 22.301 inches on 156 days in 1894, and a twenty-five years' average of 19.734 inches on 142.8 days.

At Knockdolian, Greystones, Co. Wicklow, the rainfall in September 1895, was .980 inch distributed over 10 days. Of this quantity .375 inch fell on the 4th, and .370 inch on the 2nd. At

that station the rainfall since January 1, 1895, has been 23.665 inches on 117 days, compared with 23.883 inches on 125 days in the same nine months of 1892, 17.091 inches on 118 days in 1893, and 25.896 inches on 137 days in 1894.

At Cloneevin, Killiney, Co. Dublin, the rainfall in August was 3.85 inches on 24 days (the maximal fall in 24 hours being 1.05 inches on the 10th), compared with a ten years' average of 2.917 inches on 159 days. In September only .81 inch fell at Cloneevin on 7 days. The maximal fall in 24 hours was .34 inch on the 2nd. On an average of ten years the September rainfall at this station has been 1.530 inches on 11.6 days. Since January 1, 1895, 21.58 inches of rain have fallen at Cloneevin on 129 days. The rainfall in the first nine months of 1894 at Cloneevin was 22.92 inches on 150 days.

At Claremont, Carrickmines, Co. Dublin, the rainfall in September was .69 inch on 4 days. At this station 20.86 inches of rain have fallen since January 1.

SCHWENINGERISM.

SCHWENINGER, by the grace of Bismarck, Professor, gives these details of his anti-fat treatment:—" Eat as much as you please as often as you like; but not too much at a meal. Drink no liquid at any meal. When thirsty drink a little good aërated water, with a few drops of lemon or orange juice squeezed into it; but only an hour before or an hour after meals. You may also take a little white wine or cider that is not sweet, or now and then a cup of tea, but never coffee. Smoke a little, and indulge with moderation in the other little luxuries to which you have been accustomed. Bathe often, but do not wet the entire surface of the body at once. Exercise should be regular. Change your position as often as possible. Do not remain standing or sitting or lying too long at a time, nor pass too many hours in bed. Take your meals at a different hour every day. Never eat at regular hours, but whenever you are hungry; and, if it be not too soon before or after a meal, drink whenever you are thirsty. Better eat a dozen times a day than overload your stomach at two or three heavy meals at long intervals. Do not eat the same article of food too often."—*Medical Record.*

ANTISPASMIN.

As a remedy for whooping-cough, Dr. Pruchwald reports strongly in favour of antispasmin in doses of 3 to 5 drops, given four or five times a day.—*Centrlb. f. d. gesamte Ther.*

PERISCOPE.

HISTOPATHOLOGY OF SKIN DISEASES.

DR. NORMAN WALKER, Assistant-Physician for Diseases of the Skin, Royal Infirmary, Edinburgh, has undertaken the translation into English of Dr. Unna's immense German work "Histopathologie der Haut-krankheiten." The translation is expected to be completed next month. We have seen a few specimen pages, and judging from their excellence, we are confident that this edition will be welcomed by all English dermatologists. To have placed in an accessible form, before English readers, the studies of the giant dermatologist, Dr. P. G. Unna, is a work of which Dr. Norman Walker may well be proud. In this English Edition several drawings executed by Dr. Unna will appear, which were not present in the original German edition. The work will be published by Mr. William F. Clay, of Edinburgh.

BIRTH STATISTICS.

IRELAND, which has a marriage rate of only 4.4 per thousand of population, heads the list with an average of 5.46 children to each marriage. If it were not for this high birth-rate, the population of Ireland would probably, in view of the large and constant stream of emigration from it, decrease rapidly. Next in order come all the Australasian colonies, with the exception of Victoria, ranging from New Zealand, with 5.21 children to each marriage, to Queensland with 4.60. Victoria comes modestly after Italy, Scotland, and Holland with 4.20. Scotland shows an average of 4.43, while England does not exceed 4.16. After England come Sweden, Denmark, and France. The last averages only 2.98 children in a family. Thus the largest possible increase in population in France would be small, and allowing for the deaths of children we find that it is almost stationary. Ireland shows almost the lowest record of infantile mortality, New Zealand alone surpassing her. The first year of life is that in which the dangers are greatest, but statistics show that in Ireland barely 10 per cent. of the children die before completing their first year. New Zealand, as we have said, has a better record even than this, the proportion there being 8.74 deaths to every hundred births. England's infant death-rate shows a proportion of 14.92 to the hundred, and Scotland stands midway with 12.20. The German Empire and Austria cut the worst figure in these statistics of infant

mortality. The death-rate there varies from 31.25 per cent. in Wurtemburg to 20.78 in Prussia. Italy is a little worse than Prussia, with 20.79, while Holland is rather better, her ratio standing at 19.32. In Sweden the deaths are comparatively numerous, 13.19 to 100 births; in Norway they are only 10.49. Between the figures of the two Scandinavian countries come those of the Australian colonies, Victoria heading the list with 12.68, and Tasmania ending it with 10.56. Taking the general death-rate, however, the same proportions are not maintained. Reckoning by the excess of births over deaths at all ages, we find Norway and Sweden together at the head of the list with 78 and 75 respectively. England and Scotland stand even closer, the numbers in them being 64 and 63. Ireland comes low down with an excess of only 27.—*The Hospital.*

BRITISH WORKHOUSE HOSPITALS.

MR. ERNEST HART has reprinted, from the *British Medical Journal*, a first series of Reports on Nursing and Administration of Provincial Workhouses and Infirmaries; with an editorial which appeared in the Journal of Aug. 25, 1894. Nine English and two Welsh institutions are reported on. The reports are dismal literature on the whole, but cannot fail to have good effect. Similar investigation into the treatment of the sick in our own workhouses will not be amiss; and we hasten to gratefully acknowledge the spirit in which it has been undertaken by Mr. Hart.

THE JOURNAL OF STATE MEDICINE.

THIS periodical, now in its third volume, is the official organ of the British Institute of Public Health, a society with a roll of 520 Fellows, 180 Members, and 460 Associates. Dr. C. Thresh is the Honorary Editor. The contents of the March number, now before us, will be read with interest—an ingredient of liveliness being supplied by the report, in the Transactions of the Institute, of the “very pretty quarrel as it stands” between the latter and the formidable Mr. Ernest Hart.

ANTI-CHOLERAIC INOCULATION IN INDIA.

HAFFKINE gives in this paper a sketch of the work which he has done in India during 1893 and 1894. After affirming the position of Koch’s bacillus as the true cause of cholera, he enumerates the different methods by which experimental infection of men and animals by this organism can be effected, criticises the work of previous experimenters, and points out that his own method gives

a virus capable of protecting animals safely and certainly from all forms of cholera virus fatal to them, and which is perfectly harmless when used on men. Notwithstanding the great difficulties he had to contend against in India, about 50,000 inoculations were made in a great number of different places. The author then summarises the results of those cases which could be watched during epidemic cholera. The operation was absolutely harmless, whether in the presence or absence of cholera. "Summarising the occurrences among the inoculated and uninoculated, and disregarding the question whether they are accidental or not, we have the following results:—Total number of those on whom observations have been made in Calcutta, Gaza, Cawnpore, and Lucknow, is 2,235. Of these were inoculated 500, and 1,735 not inoculated. Inoculated had 21 attacks and 19 died, giving a percentage of cases to total of 4.2 and deaths to total of 3.8 per cent. Uninoculated had 174 attacks and 113 died, giving a percentage of cases to total of 10.63 per cent., and deaths to total of 6.51 per cent. These figures not only show that the inoculations are harmless, but show a difference in the occurrences that, if interpreted, can only be interpreted in favour of the inoculations."—*Indian Medical Gazette*, Jan., 1895.

RHINOPLASTY IN INDIA.

IN the *Indian Medico-Chirurgical Review* for January, Mr. T. M. Shaw, L.M., Chief Medical Officer Junagadh State (Bombay), reports that in four years (1885–89), he performed 100 rhinoplastic operations. "In the next five years, 125 more operations were done, and this gives in the first four, as well as latter five years, an average of twenty-five cases a year. Although, as above alluded to, my beginning in this line of surgery at Junagadh arose from the atrocities of the outlaws, the influx of cases has continued long after the outlawry has become extinct, showing that the atrocious spirit of wrathful husbands and others is no less extensive."

RECTO-VAGINAL FISTULA.

THE *Gazette Médicale de Paris* (9 Mar., 1895) reports a paper read before the Société de Chirurgie, by M. Segond, describing a new method of operating in a case of recto-vaginal fistula. We should spoil M. Segond's aetiological statement by attempting to translate it:—"Il y a seize ans, une jeune fille s'introduisit, de concert avec une de ses contemporaines, un pot de pommade dans le vagin. La pommade s'écoula, le pot resta. Des deux vierges, l'une mourut bientôt, emportée par une péritonite foudroyante, et l'autre survécut. Même elle se maria et une tolérance parfaite s'établit entre

le mari, le pot de pommade et le vagin. Mais, il y a quelque temps, des accidents graves survinrent; on fit appeler à trois reprises le docteur Ferrand; il voulut examiner le malade: mari et femme, tout le monde refusa. Mais, comme les accidents empiraient, celle-ci fit enfin sa confession; on retira, non sans peine, le pot de pommade; mais derrière lui des matières fécales étaient accumulées et une large fistule recto-vaginale occupant toute la largeur de la paroi vaginale postérieure s'était établie. On me demanda. Il fallait opérer; mais que faire?"

COMPULSORY VACCINATION IN BERNE.

A LAW (says *La Gazette Médicale de Paris*) making vaccination compulsory in the canton of Berne being submitted to referendum was rejected by 24,000 votes to 23,000. Sixty-eight thousand electors expressed no opinion.

GENERAL PARALYSIS.

THE *Hospital* summarises the results of Dr. Clouston's investigation into the prevalence of general paralysis in Morningside and other Asylums. In 1894, Scotland, with a population of four millions, had 150 cases in her asylums, besides those which were to be found in private practice; England had 1,400 cases; "Ireland, with a population equal to that of Scotland, only sent 52 cases." As to causes, the most frequent, according to Dr. Clouston, is alcoholic excess; next in order being worry, misfortunes, over-work, and, finally, "love and religion."

SYPHILIS IN EUROPEAN ARMIES.

THE following figures, given by the *Gazette des Hôpitaux*, will be found useful:—In 1885, the proportion of those in the German army suffering from syphilitic affections was 29.7 per 1000; Italian army, 86 per 1000; French army, 50.6 per 1000. In 1889, German army, 26.7 per 1000; Austrian army, 65.3 per 1000; Italian army, 99 per 1000; French army, 45.8 per 1000.—*Indian Medico-Chirurgical Review*.

PNEUMONIA IN NEW YORK.

WE are indebted to the *Montreal Medical Journal* for the following figures, showing the increased occurrence and fatality of pneumonia in the city of New York:—In the week ending 26 January 1899 deaths out of 993 (about 1 in 5) were due to this disease. In 1830 the mortality from pneumonia was 1 in 22.8 deaths; in 1893, 6,487 in 44,486, or 1 in 6.86. The increase coincides with epidemics of influenza.

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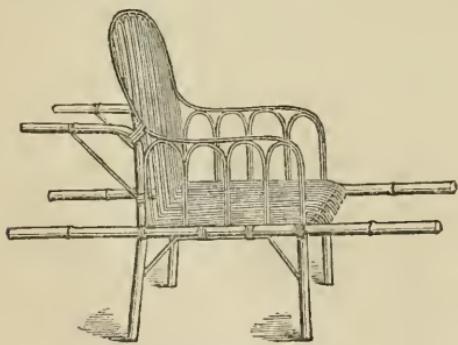
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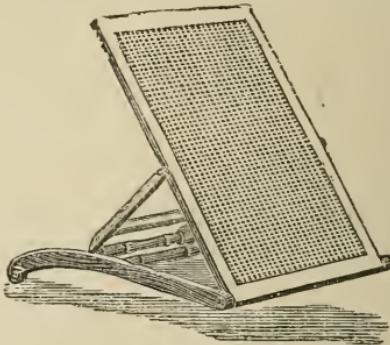
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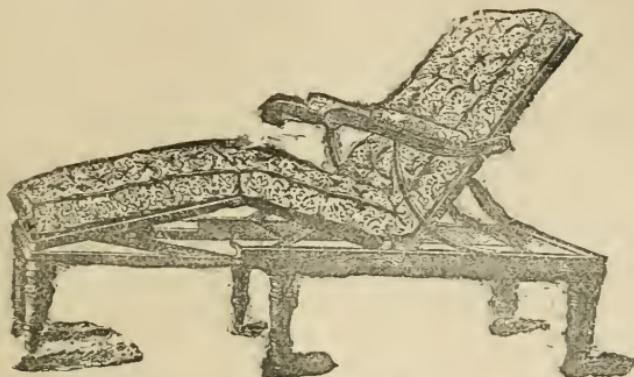
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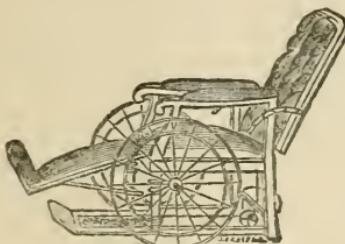
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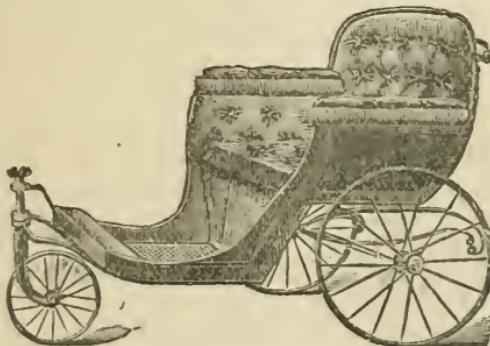
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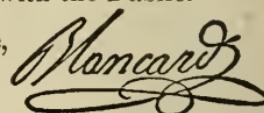
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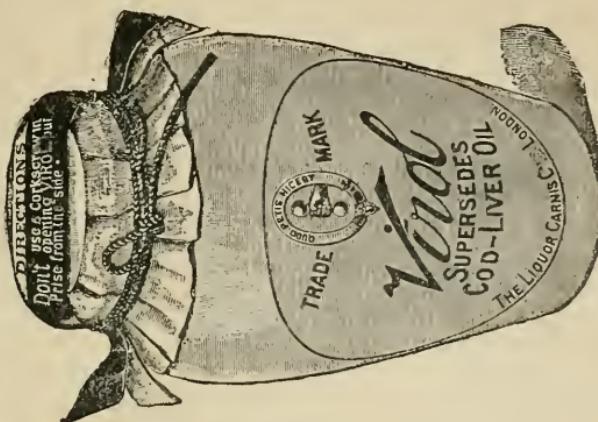
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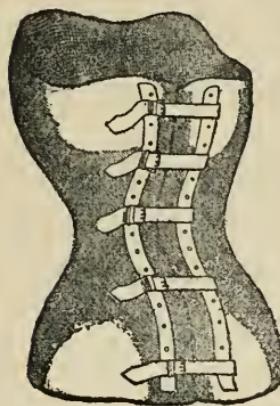
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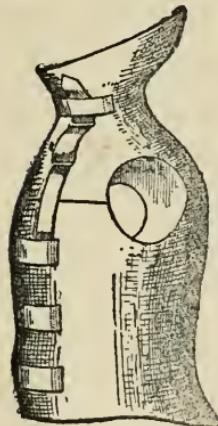
 " waist.

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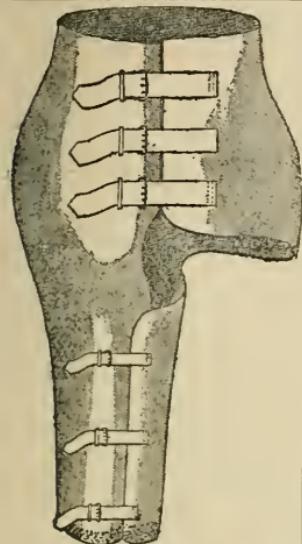
 " of foot.

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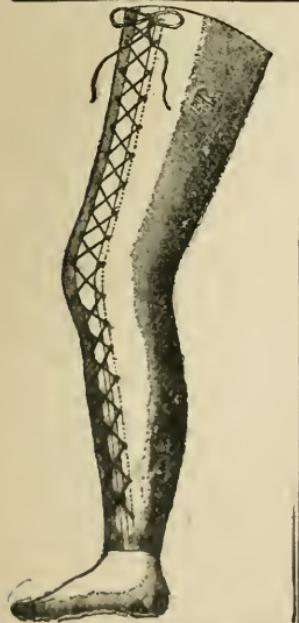
” hips.

” thigh, top of

” above knee.

Length from waist to groin.

State if for right or left side.



LEG SPLINT.

Circumference at top of thigh.

” above knee.

” at knee.

” below knee.

” calf.

” ankle.

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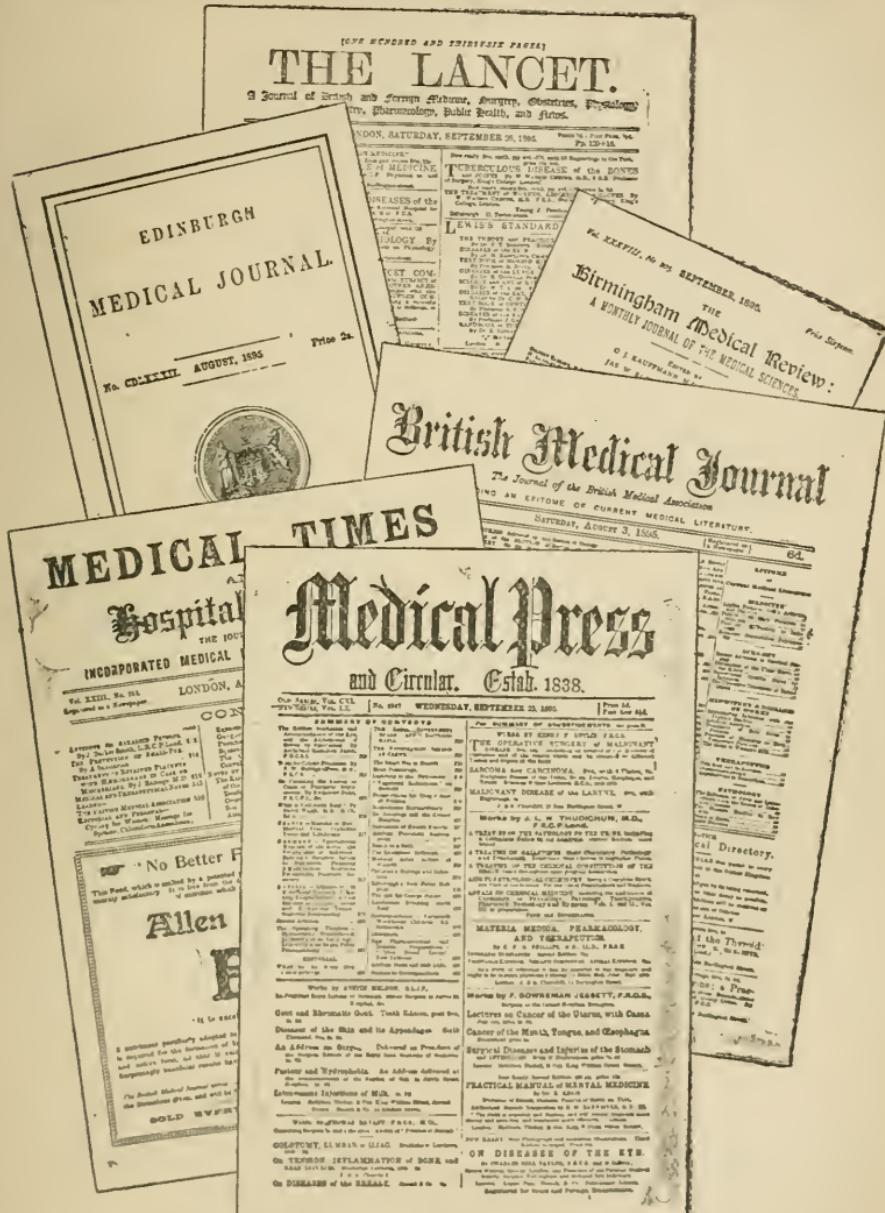
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Dr. S. RIDEAL, D.Sc.Lond., F.I.C., F.C.S.

Lecturer on Chemistry at St. George's Hospital Medical School.

“January 3rd, 1895.

PETROLEUM JELLY.

The samples of Petroleum Jelly received on December 20th, 1894, and marked Yellow No. 1, and Yellow No. 2a, have been examined by me, and I find that they possess the following characteristics:—

	Melting Point.	Specific Gravity		Flashing Point	
		Liquid. @ 140° F.	Solid. @ 60° F.	Open.	Closed.
Yellow No. 1.....	95°	.868	.898	432°	426.5°
Yellow No. 2a.....	85°	.866	.895	430°	414°

Both samples were tested for saponifiable fat and resin, but neither of these substances were present. There was no ash in either sample, and in colour and general appearance showed that they had been carefully manufactured. They were also practically free from any taste, and contained no traces of any free acid.

I believe that both qualities are high class Petroleum Jellies.

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